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UNIVERSITY OF ALBERTA

AN EXAMINATION OF ACCESS TO UNIVERSITY EDUCATION IN ALBERTA: A PROBLEM STRUCTURING APPROACH

BY

JUDITH ANNE HUGHES

A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

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UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

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An Examination of Access to University Education In Alberta: A Problem Structuring Approach

Abstract

In spite of efforts over forty years to democratize access to university in Alberta, some groups are still under-represented, notably those from lower socio-economic backgrounds. Defining the access issue as an economic one has misrepresented the problem and has resulted in inappropriate policy solutions. An assumptional analysis of access policy reveals that the problem is a sociological one rather than an economic one. This re-definition suggests different kinds of solutions. These include closer liaison between Alberta Education and Alberta Advanced Education and Career Development; addressing the family, cultural, socio-economic, and schooling aspects of university non-participation; identifying the need to target specific groups with initiatives designed to address their particular access problems; clarifying the roles of educational consortia, community colleges and "open" universities. Based upon the assumptional analysis of access policy, recommendations are made to address the access issue.

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CHAPTER I

1.1 Introduction

There is considerable evidence in the literature that access to and participation in university level education cannot be fully understood if viewed only from an opportunities' point of view. Moreover, defining the access issue as an economic one may well misrepresent the problem and create inappropriate solutions.

Since policy solutions aimed at improving participation by traditionally under-represented groups have not been successful, a challenge to underlying assumptions may be necessary. Indeed, the very definition of the problem as an economic one may need to be questioned. If the definition of the problem has been incorrectly framed in economic terms, then solutions involving the distribution of scarce resources, would not be expected to have been successful.

This study seeks to find a more productive means of relating the definition of the problem to the policy solutions. This will be done by isolating issues that can then be structured and viewed in such a way that a problem-solving approach can lead to recommendations that will have an impact upon university participation.

Literature in the area of needs assessment provided useful information in an examination of the extent to which existing initiatives meet goals of participants, but the

literature did little to address the needs of non-participants. (Cunningham, 1971; Hassen, 1973; Hays and Linn, 1977; Kaufman, 1976, Ministry of Colleges and Universities, 1984; Reyes, 1977; Smith, 1991). Program implementation and evaluation literature examined the effectiveness of existing programs for participants as well as addressing accountability issues for educational administrators (Coleman, 1990; Curtis, 1988; Fetterman and Pitman, 1986; Hagood, 1981; Hjern, 1982; Kleppick et al., 1978; and others).

Considerable discussion about the ethics and practicality of universality of access to higher education has taken place for the past two decades (Coleman, 1990; Foster, 1987; Furniss, 1971; Greely, 1971; Holmes, 1985; Lucas, 1975; McMahon, 1982; O'Neil, 1971; Porter, 1979; Smith, 1991; and others). Socio-economic as well as political ramifications of universality are issues in most of the developing world, and views in the literature were often related as much to political ideology as educational viability. Notions of education as a means of reproducing the social status quo challenged the rhetoric of equality of opportunity (Apple, 1982; Bourdieu and Passeron, 1977; Coleman, 1990; and others). Vickers and Adams (1977) noted that "While the universities have tended to isolate themselves from societal pressures in some contexts, they have reflected the norms and prejudices of their society in

many critical ways .... On the whole, universities have tended to reinforce rather than alter societal choices" (p. 24). Accordingly, barriers to university education are a result of social class, race, ethnic background, place of residence, financial status, gender and other factors.

In the 1960s and 1970s in Canada higher educational policies favoured universality of access for three reasons: (1) aggregate demand was high; (2) investment in human capital was seen as a "good investment" and (3) social justice reasons favoured equality of opportunity. However, things changed in the late 1970s and 1980s. Paul Anisef (1985) in a paper prepared for the Secretary of State for Canada, pointed out that these reasons for universal access gave way to a growing cynicism. Though the demand remained strong, critics pointed to the underemployment and unemployment of graduates as a negation of the "good investment" argument. Moreover, they suggested that the expected democratization of higher education participation had not taken place. When escalating costs were added to the discussion, a retrenchment posture emphasizing restraint began to characterize the policy of the 1980s and 1990s.

For example, in Ontario, the Bovey Commission (1984) had as one of its terms of reference "to address the issue of accessibility to university level education **in the context of economic realities**" (emphasis added). In 1984 Alberta Advanced Education released its Participation

Patterns Study and referred to equity and equality but advised that this would include a stronger emphasis on "efficiency and more precise diagnosis of socio-economic accessibility." The report suggested that accessibility as a policy required re-thinking. In fact, Alberta Advanced Education and Career Development has not opted to continue the participation patterns study as a longitudinal series and appears not to have a clear intention to monitor participation rates in any serious way during the 1990s. This is a missed opportunity to use a proven research format to collect data to inform policy decisions regarding university access.

Some critics have suggested that a negative relationship exists between quality of undergraduate education and open access. Leslie (1980) in discussing the future of Canadian universities, maintained that the emphasis upon minimum standards disburses resources and militates against excellence. Nonetheless the concern regarding equity continues to be reflected in the literature, both in Canada and abroad.

To date, most of the discussions regarding access to post-secondary education have taken the perspective that examines educational opportunities and participants. In fact, participation rates are expressed this way. Clearly, though, the purpose of such indices as participation rates is to plot changes and trends. It may be that a focus upon

barriers to participation will yield a more productive means of raising and isolating issues. In view of the observation that universities have not experienced a democratization to any great degree, it would appear that barriers are not merely the opposite of opportunities and that a further examination of opportunities and participants will tell us little about barriers and non-participants. The body of knowledge could be greatly enhanced by an examination of access from a barriers' point of view that would focus upon problem areas and structure such problems so that either policy recommendations are possible, or the need for further study is elucidated. Such a focus requires a conceptual analysis technique that:

(1) is designed for ill-structured problems;
(2) takes a critical view of stakeholder identification;
(3) teases out and critiques underlying assumptions of current policy that maintain barriers; and
(4) structures problems in a way that addresses barriers.

One strategy known as "assumptional analysis" provides a grounding for such a technique (Anderson, 1981; Dunn, 1981; Mason and Mitroff, 1981). A critical view of stakeholder identification and the structuring of ill-structured problems are process issues in assumptional analysis. There is a body of literature which focuses upon this area (Mitroff, 1983; Mitroff and Mason, 1980).

1.2 Contribution of Present Study

In recognition of the expressed importance of expanding access to university level education in Alberta, this thesis attempted to explore notions of democratization of access. The dynamics of participation and non-participation are explored in the light of contemporary discussions about the role of education in our society.

The thesis is essentially a policy analysis that explores the assumptions underlying historical and recent policy meant to improve access. Also examined are the assumptions of educational administrators as well as community representatives.

Chapter I has outlined the basic problem under examination as well as the specific research questions.

In Chapter II the notion of universality was explored from an historical/theoretical point of view and an examination of Canadian and Alberta participation rates will be undertaken. The philosophical argument about the role of education as either guardian of the social order or agent of social change will be discussed, as will the alleged inverse relationship between access and quality. The appropriateness of problem structuring/assumptional analysis as a conceptual framework for access policy analysis will be presented.

In Chapter III the imperative to democratize university access and educational participation as a social artifact

was examined within the context of reform movement versus ideological shift. Within this context the equality/quality dichotomy will be evaluated and Alberta access policies will be discussed and implications derived.

Chapter IV outlines the thesis methodology, evaluating the appropriateness of methodological approaches and describing methods used. Limitations of the study will be delineated.

Chapter V provides the analysis of two data sets, first the trend analysis of university participation data in Canada and Alberta and, second the assumptional analysis of access policy. Policy assumptions will be analyzed using an adaptation of a conceptual framework designed by Dunn (1981). This problem structuring approach provides a procedure called assumptional analysis.

Chapter VI revisits the research questions and provides the conclusions from the analysis and recommendations for policy implications and further research needed.

In summary, there are two basic contributions of this study. One has to do with methodology, the other with outcomes. From a methods point of view, the application of problem structuring and assumptional analysis to the access problem provides insight into the use of the model in addressing complex policy problems. It can serve to demonstrate how this approach could be used in other policy problem situations.

From the point of view of outcomes, the study is meant to lead systematically to recommended solutions to the access problem. Specific recommendations will address the means by which the participation of particular groups in university level education might be increased.

1.3 The Problem

The growing body of evidence suggests that policies to redress the inequity of university access may have been founded upon erroneous underlying assumptions. Indeed, there is evidence that the basic definition of the access problem may have prompted a set of solutions that solved the wrong problem. In spite of policies designed to encourage participation by groups that have historically been under-represented at university, such democratization has not taken place. The tremendous growth in enrolments in university over the past forty years suggests that these policies may have been responsible for increasing absolute numbers of university students. This is frequently referred to as Type I accessibility in the literature. However, the policies do not appear to have addressed the so called Type II accessibility issues related to increasing participation by historical non-participants.

In spite of efforts to democratize access to university level education in Alberta, some groups are still proportionately under-represented. In the face of undeniable participation rate data, our collective cognitive

dissonance on this issue must be put aside and clear policy directions recognized.

There is a need to examine the definition of the problem, for if policy continues to be developed within a context of a poorly defined problem, the solutions will continue to be unsuccessful. The fundamental definition question has to do with whether the problem is seen as an economic one or, rather, is it essentially sociological, political or cultural? This will be examined in this thesis.

We can no longer deny the importance of the contradiction between reality and existing beliefs, nor can we relieve our uncomfortable dissonance by demanding further evidence. The evidence is apparent and clear. We need only organize it and structure it in a problem-solving, policy directive way.

Furthermore, complex policy problems would benefit from a systematic means of analysis that would ensure that problems are properly defined before solutions are developed. If current solutions are not having desired results, this suggests that there is a need for a policy analysis framework designed to re-structure the problem itself.

1.4 Research Questions

In what ways can university participation rates of particular groups be improved by policy change based upon an assumptional analysis of university access policy in Alberta?

Subsidiary Questions

(1) Has the access to university problem been adequately defined in order to inform policy makers and allow solutions that will solve inequities?

(2) What groups have been identified in the literature as non-participants in university level education?

(3) What underlying assumptions have resulted in policy decisions that have served to sustain barriers?

(4) What process and outcome observations can be expected from a problem structuring approach to access policy analysis?

(5) What are the policy implications of an assumptional analysis/problem structuring approach to university access?

(6) What recommendations can be made to improve participation rates of currently non-participating groups in Alberta?

(7) What areas require further research?

CHAPTER II

Review of the Literature

2.1 Introduction

The literature review for this study has been divided into five broad areas: (1) Universality and the Role of Education; (2) University Participation Rates in Canada and Alberta -- Sensing a Problem; (3) Problem Structuring/ Assumptional Analysis as a Conceptual Framework; (4) Ideological Shifts and Reform Movements; (5) Appropriate Methodological Approaches. The literature review in the case of (4) will be included in Chapter III, and (5) will be included in Chapter IV.

2.2 Universality and the Role of Education

The meta-values underlying assumptions about the role of education as a maintainer of the existing social order on the one hand, or the agent of social change on the other, lie at the very heart of universality. Because these two broad positions do not adequately explain the wide ranging views on this issue, a dialectical approach has characterized the discussions in the recent literature. Liberal rhetoric that politics should keep out of education notwithstanding, it is clear that education is inherently political and complex, for as Hall (1977) pointed out "education exists in the most complex and intimate

relationship with other processes in society, and...it can never be isolated from those forces"(p. 5).

An argument for universality requires a consideration of values and choices. Lundgren (1983) argued that in a society that is socially and economically differentiated, the content of education requires a choice of values, knowledge and skills. This is because there is no particular body of knowledge and values to be transmitted and accordingly,

> a choice had to be made and it was made, and it was one that reflected the positions of power held by various groups in the society...the choice of an equal education for all also means a choice of a given interpretation of society and culture. (p. 149)

That education is inherently ideological was expressed by Berlak and Berlak (1983) as follows:

> Ideologies...portray existing social arrangements as given, as beyond human control, and as benefiting everyone by casting the interests of the dominant groups as congruent with the public interest...the meritocratic ideology presents particular forms of work and human preoccupations as more valuable and deserving of greater status and economic reward, and the existing hierarchical social arrangements and enormous discrepancies in wealth and power as normal, legitimate and fair. (p. 271)

By the 1950s education was being viewed as the means of achieving democracy, social harmony, equality and social mobility. In the mid-1960s faith in education had grown to the point that it was seen as the panacea for establishing an equal society, while at the same time it was also to be credited with maintaining economic growth and providing

everyone with interesting jobs and high incomes. This prevailing view, referred to as meritocracy in the literature, rests in the hope that education will be an equalizing force in society. However, this hope in turn, rests in the notion that equality of opportunity (narrowly defined as providing all young people with the same opportunity) will naturally result in democratization and equalization. During the 1960s and early 1970s, however, evidence mounted that rhetoric regarding equality of opportunity notwithstanding, educational success was still most closely associated with family status (Coleman et al., 1966; Jencks et al., 1972, and others). Jencks et al. (1972) dampened the optimistic 'equality of opportunity' panacea approach by suggesting that "No single general strategy will eliminate all sorts of inequity. Instead, there must be a variety of specific strategies for dealing with specific kinds of inequity" (p. 260).

The 1970s and 1980s were characterized by a lively discussion in the literature about theories of reproduction and hegemony that tried to explain education's role in reproducing the social hierarchy. Bowles and Gintes (1976) following upon the work of Althusser (1971), represented the critical functionalist view that linked the role of education very much with preparing young people for the world of work. They stressed the structural correspondence between school and economic production and pointed out that:

> The educational system helps integrate youth into the economic system...through a structural correspondence between its social relations and those of production...(the role is to) replicate the hierarchical division of labour. (p. 131)

Reacting to Bowles and Gintes' view of the world were so-called radical educational theorists who represented what is often referred to in the literature as the critical autonomy view. Following in the tradition of Dewey (1966), this view was represented by Apple (1982); Bourdieu and Passeron (1977); Giroux, (1983), to name the most prominent. This view was characterized by the notion that schools can create values independent of the workplace. For example, Apple (1982) argued that there is nothing inherent in the relations of production that ensures a simple correspondence between schooling and work, rather, that schools can help create conditions for maintaining ideological hegemony. For his part, Giroux (1981) argued that consciousness is an active force. Schooling, therefore is an active medium, acting to sustain and resist the values of the dominant society. This notion of resistance, the idea of resisting the concept of economic determinism, is at the heart of critical theory.

Bourdieu and Passeron (1977) in addressing the reproduction debate regarded schools as reproductive in a cultural sense through reinforcement in the schools of the predominant ideology and culture so they are taken for granted as legitimate. That is, the "cultural capital" of

the wealthy young people equips them to take advantage of the "equal educational opportunities." Bourdieu and Passeron claimed that it is, in fact, the relative autonomy of the educational system that enables it to serve external demands under the guise of independence and neutrality. The charge is that schools can perform this social function more effectively because the process is concealed.

Carnoy and Levin (1985), although normally viewed in the literature as functionalists can, in many ways, be seen to link the two critical views, those of critical functionalists and critical autonomists. Although Carnoy and Levin agreed that schools are "specifically designed to prepare young people to function in the bureaucratic hierarchies that they will join as adults" (p. 1), they also acknowledged that "schooling tends to be distributed more equally than capital, income, or employment status... teachers and school administrators believe that what they are doing in the schools has its own higher purposes" (p. 2). Carnoy and Levin concluded that there is, in fact, a paradox at play, that they expressed as follows:

> How can the school at one and the same time be an institution that reproduces the unequal class relations of capitalist society and an institution that is more democratic and equal than the work-place for which it prepares students...we believe that though schools do reproduce unequal class relations, the fact that they do so imperfectly merely reflects the social conflict that characterizes the capitalist society they serve. (p. 4)

The recent literature, then seems to be coalescing

around the notion of a dialectic, a tension between the two dynamics of capitalist imperative and democracy, for as Carnoy and Levin noted "the very nature of capitalism and democracy creates internal incompatibilities and conflicts" (p. 5). They summarized the role of education in this respect as follows:

> Education is, therefore, subject to tension between two conflicting dynamics attempting to influence the control, purpose, and operation of the schools. On the one hand schools have traditionally reproduced the unequal hierarchical relations of the nuclear family and capitalist workplace; on the other they have represented the expansion of economic opportunity for subordinate groups and the extension of basic human rights. (p. 14)

Carnoy and Levin (1985) view the tension as the very reason for educational expansion in the past twenty years. They noted, "In our view, the educational system of a democratic state tends to serve the changing imperatives of both the workplace and the norms of a democratic society" (p. 77). Angus (1986) essentially agreed with this dialectical view and in spite of the persisting arguments from Giroux (1983) and others, Angus concluded:

> Schools as an integral part of society have a dialectical influence upon social structures which is captured in the question: Do schools change (or at least, shape) pupils to fit the existing society; or do schools educate pupils to change (or at least, shape) society to fit them? I think the answer to this question, despite the power of reproduction arguments, is that schools do both. (p. 26)

Universality with respect to university in particular, became topical during the 1970s as the fiscal realities

began to militate against the liberalism of the 1960s. Greely (1971) warned of the complexity of the discussion of universality by noting, "For the university to assume that it can eliminate background differences when their nature is not even fully understood is, in my judgement, the height of arrogance" (p. 84). Admonishing the universities further Greely addressed the issue of values thus, "who has made us academics the custodians of the true faith of society; who gives us the right to judge that our values are superior to the values of other people?" (p. 6). Roderick and Stephens (1979) and other theorists of the late 1970s and early 1980s proposed a balanced higher education system that would prepare students for the world of work and also provide a means of transmitting a common culture and common standards of citizenship. However, more and more of the literature began to express concern about limited resources and the so-called funding-access-quality triangle. Leslie (1980), for example, expressed concern that access and quality had an inverse relationship and that open access would necessarily militate against quality. However, the proponents of increased access dismiss this criticism. Anisef (1985) for example, noted:

> Critics who have challenged the merits of sustaining access to higher education frequently link the continued promotion of accessibility with decreases in quality of education. Most of these arguments are based not on hard evidence, but supposition...we need challenge the taken for granted or almost mystical conception of "quality" and begin to develop clear, empirical measures of

the concept that make good sense. (p. 216)

During the 1970s and 1980s, the literature regarding Canadian notions of universality of university education were consistent with the international body of knowledge. Vickers and Adams (1977) identified five of the major barriers as social class, race, ethnic background, place of birth and gender. The relationship between education and other processes within society they summarized as follows:

> While the universities have tended to isolate themselves from societal pressures in some contexts, they have reflected the norms and prejudices of their society in many critical ways...on the whole, universities have tended to reinforce rather than alter societal choices. (p. 24)

Porter (1979), a respected commentator on the Canadian society pointed out that:

> The link between education and equality, it was believed, was that investment in individuals through education would improve their skills which they could in turn convert into income in the labour market. Greater investment in human capital, it was thought, would lead to higher productivity of the economy. (p. 241)

However, the notion that education would be an instrument of social equality was a false promise according to Porter (1979). Moreover, he noted that, "inequality of condition can nullify the effects of whatever might be introduced to implement equality of opportunity" (p. 245).

During the 1980s and early 1990s the literature reflected a judgemental mood regarding universality of access to post-secondary education. Cormer (1985) cautioned

against problem-solving processes devoid of adequate analysis that simply bring about "disillusionment and hopelessness about public education" (p. 17).

Bastien et al. (1985) criticized a simplistic polarization of the problem that results from the so-called back-to-basics "excellence" movement, for defining the problem this way shapes the solution accordingly (p. 13). As a result, Bastien et al. continued, a paradox confronts educators. On the one hand universality of access is sought, but on the other, competition is encouraged within schools.

As to the alleged liberalization of the 1960s and 1970s, Bastien et al. claim this is a myth, that exclusive meritocracy was simply replaced by inclusive meritocracy. In Alberta, Kilpatrick (1988) criticized the "back-to-basic" movement as elitist and a barrier to post-secondary education.

Coleman (1990) stressed that norms of equality are time and space specific and that the debate should emphasize the effects of schooling rather than school resource inputs (p. 63). In retrospect, Coleman noted that the influence of family background on participation in post-secondary education has strengthened over the 1980s and 1990s, suggesting that there is a need to free student achievement from home influence. By extension, if schools are to achieve equality of results, they must empower and resist

the natural tendency to replicate the existing social order.

In the current decade, Smith (1991) identified five groups who are not equally represented in higher education: the less affluent; Native peoples; disabled people; women (in certain fields) and French speaking Canadians outside Quebec (p. 94).

2.3 University Participation Rates in Canada and Alberta - Sensing a Problem:

Pike (1970), in pondering the question of "who doesn't get to university and why", drew upon the work of Bowles (1965) and pointed out that there are two senses of access to higher education:

> First, it is associated with the notion that every person should have an opportunity for education commensurate with his abilities. There is nothing new in this notion, but expressed in political language as "freedom of education" it has become as influential in its consequences in this century, as freedom of speech and freedom of worship were in the eighteenth century. Secondly, it is associated with the consequences of the educational policies of a given society. (p. 2)

Hence it is that a country makes decisions, perhaps based upon tradition or upon radical new departures, regarding the deployment of resources for educational purposes. These decisions determine both the types of education that will be offered as well as the categories of individuals who will be permitted to benefit from them. The emphasis is upon resource distribution, hence economic issues, not sociological issues and the distribution of

power. Moreover, in times of scarce resources, Pike's first sense of access would be subject to relativistic interpretation in practice. Pike (1970) and his contemporaries began to express the view that access to higher education as a social and political issue is complex and controversial, though it is, in the end, an extension of the earlier discussion of access to primary and secondary education. In this sense, it may be viewed as the natural evolutionary process in which the public focus has extended to include concerns about higher education.

Documentation of the growing world concern about the notion of access to higher education indicates a trend. The British Robbins Committee Report of 1963 represented a comprehensive sociological investigation of higher education in the United Kingdom. In 1967, a conference of European education ministers met with access to higher education as the main theme of the conference. UNESCO commissioned, and published a survey on the subject of admissions. In Canada the Bladen Commission (1965), though not focusing upon access to higher education, did address the issue. Increasingly in Canada, references to this issue were made by organizations that normally concern themselves with economic issues (e.g. The Economic Council of Canada). The link was being made between higher education and economic growth and hence viewing non-participation as an economic problem. Investment in "human capital" was being viewed as

a "good investment" for the individual with respect to increasing life earnings, and for the society in terms of economic returns through increased productivity. In the 1990s, with the benefit of hindsight, it may be argued that with this preoccupation with the human capital investment aspect, assumptions underlying many policy decisions may not have been as straightforward as economists would have liked because the problem may not have been an economic one.

Cormer (1985) and Bastien et al. (1985) would view this as too simplistic a representation and Coleman (1990) would argue that this emphasis upon school inputs has been revealed as a false basis for policy decisions over three decades. This is the growing sense that perhaps the problem had been characterized incorrectly.

Smith (1991) pointed out that in Canada, in spite of increased aggregate participation rates over the years, "universities continue to draw the large majority of their students from the financially advantaged socio-economic classes of our society" (p. 94). To address the financial barrier of foregone income, Smith viewed an income contingent repayment student assistance plan worthy of consideration. This surtax on federal income tax based on future earnings, was reviewed and recommended by Ahamed, Rowley and Wisenthal (1991). The non-financial barriers, Smith noted remain those reported in the literature for years: cultural, family, and individual expectations.

Since fundamental decisions that will affect participation in post-secondary education appear to be made around grades 7,8 and 9 in Canada, Smith and others recommended transition programs to bring school boards and post-secondary institutions together. This is reminiscent of Jenck's (1972) notion of a need for a variety of specific strategies aimed at specific kinds of inequity.

In Canada and Alberta, as elsewhere, progress in efforts to increase participation of under-represented groups is normally quantified as participation rate data. The enrolment numbers of a particular group (e.g., women) in a population segment (in the case of higher education participation rates this is usually the 18 - 24 age group) are expressed as a percentage of the total number of individuals in that particular group and population segment.

Anisef et al. (1982), reflecting about research and discussions about equality of educational opportunity in Canada, concluded that experience should suggest the desirability of evaluating accessibility of higher education in non-monetary terms. Accordingly, a review of empirical accessibility studies would include those that examined the impact of social facts as well as economic ones. The sense was growing that sociological issues, not just economic ones, were at play. For example, Porter's (1965) The Vertical Mosaic: An Analysis of Social Class and Power in Canada, suggested that the Canadian class structure

militates against equality of educational opportunities for individuals possessing certain social qualities. As part of the analysis of class and power, Porter analyzed data collected from 8000 university students across Canada. These students represented a cohort for the 1956-57 academic year and the major findings indicated that students from upper socio-economic family backgrounds were significantly over-represented while those from lower socio-economic backgrounds were seriously under-represented. Five years later another survey confirmed that these findings were still valid.

A further five year period did not bring about significant shifts. Rabinovitch (1966) examined the social and economic backgrounds of 1887 students studying in Canadian universities and colleges. Socio-economic status (SES) was measured in terms of parental income, education, and occupation. In spite of the fact that student awards programs were in place by this point, the SES relationship with participation rates was essentially unchanged. For example, although one third of the Canadian population fell in the $3000 - $4999 annual income category, they only accounted for 19% of the student population; although 23% of the Canadian population was classified as having professional, managerial or proprietary positions, the children of this group represented 48% of the student population; although only 5% of Canadian male heads of

families held university degrees, their children accounted for 25% of the student population. The study also pointed out that individuals from rural settings and women were under-represented.

Breton (1972) using data collected in 1965, provided further information about the relationship between community size and participation rates. Urban males were more likely to plan to complete high school and proceed to post-secondary education than their rural counterparts. This relationship did not hold for females, however. A more interesting finding, when viewed from the 1990s is that SES was found to be positively related to a student's subjective evaluation of his or her intelligence, sense of control over events and confidence regarding employment.

Gilbert and Auger (1988), in examining student finances and university attrition found that lower SES students exhibited great uncertainty and lack of control with respect to financing their education. Although students from all SES groups expressed a wish to fund a greater proportion of their expenses from summer earnings, lower SES students were not able to earn as much in summer employment as their higher SES counterparts and they had to rely upon government student aid to continue. Nonetheless the lower SES group was likely to experience interruptions in their educational career because of financial problems.

Clark et al. (1969), based upon data collected from

8700 students enroled in Ontario grades 9 to 13, provided information regarding attitudes about post-secondary education. Although students at all SES levels agreed that a post-secondary education provided other than financial rewards, only 38% of the lowest SES group and 69% of the highest SES group of grade 9 students **desired** a university education. With respect to **expectations** of acquiring a university education, the percentages were 26% and 63% respectively. By grade 12, the desirability of university education rose to 75% for the lowest SES group and to 86% for the highest SES group. Lower SES students, according to self-report, received considerably less parental encouragement to attend university than did higher SES students, and student program choices in high school were such that lower SES students were more likely to choose four-year programs (i.e. not university preparation).

Porter et al. (1982), based upon 1981 data collected from 8548 grades 8, 10 and 12 Ontario students, provided a comprehensive examination of the aspirations and expectations of these students. Factors analyzed included SES, gender, franco/anglophone, I.Q., and urban/rural. The major findings are too comprehensive to be itemized here, but in general they indicated that in terms of aspirations and expectations of proceeding to university, an upper-class, urban anglophone male is most likely to aspire and expect to attend, even if mental abilities would not suggest

that he would likely be successful. The most deprived group was seen to be lower-social-class girls, even those with high mental ability.

Anisef et al. (1985) utilized data collected from a cohort of Ontario grade 12 students in 1973. The cohort was surveyed again in 1979 (59.6% tracing of the original cohort of 2555), so that, in addition to post-secondary participation information, employment data could also be obtained. In addition to the relationships between SES, gender, and community size upon access, which reinforced findings reported previously, Anisef et al. pointed out that high school program selections were related to SES and community size. Programs designed to lead to post-secondary education were more likely to be chosen by higher SES urban students. In terms of sources of financing higher education, the lower SES students were more likely to need student awards programs to supplement summer earnings. Gender and academic achievement were found to influence the prestige and pay associated with employment following graduation, while SES exerted only minor influence.

Since SES has historically been the major variable with respect to participation in post-secondary education, and the growing suspicion that aspirations and expectations relate directly to SES, the literature dealing with the sources of social inequity is pertinent. Anisef (1982) reviewed the literature related to values and child-rearing

practices (Bronfenbrenner, 1958; Kerckhoff, 1972; Kohn, 1977; Pike and Zureik, 1978; Rosen, 1959). Lower SES families were found to encourage conformity and value higher education less than higher SES families. Higher SES families were found to value more self-direction over conformity, placed a high value on higher education, and encouraged achievement-motivated behaviour in their children. With respect to self-image and aspirations regarding education, Breton (1972) found that the intention to complete high school and proceed to post-secondary education, was related to positive self-attitudes, including self-acceptance, self-knowledge and a positive self-rating of mental ability (p. 129). Breton noted that:

> ...the adolescent's formulation of an educational plan and career-goal is based on his views of the future and of himself in relation to it. For some, self-knowledge may be the pivotal variable; for others it simply may be the self-concept of ability or the sense of control over the course of events; or it may be a combination of these attitudes. (p. 382)

In terms of parental encouragement, there is a growing body of literature to suggest that parental aspirations and encouragement are factors within the SES variable that influence the aspirations of young people, in fact, to a greater extent than peer influence (Kahl, 1953; MacKinnon and Anisef, 1979; Sewell and Hauser, 1980).

Ethnicity must be considered when examining educational participation rates in Canada given the public policy and philosophical encouragement of pluralism and

multiculturalism. Eschewing the "melting pot" assimilation approach taken in the United States, Canadian philosophy and policy encourages diverse ethnic groups to maintain their cultural uniqueness. Vallee and Shulman (1969) suggested that pluralism might well result in greater inequities, for, if an ethnic group turns in upon itself and has its own institutions, it may produce students who cannot cope in the greater community. On the other hand, a "culturist view" would suggest that the positive effects of the family solidarity characteristic of strong ethnic groups is simply more important. This view was put forth by Pike and Zureik (1978) who pointed out that in some cultures the need for upward mobility is tempered by the value placed on time for the family. Other values implications were pursued by Curtis and Scott, 1979; Johnstone, 1969; Tepperman, 1975.

With respect to gender-role socialization, Anisef et al. (1980) concluded:

> Whether we consider accessibility, equality of opportunity within post-secondary institutions, or the consequences of acquiring a higher education, women fare more poorly than men. Proportionately more women, in spite of generally superior academic performances, are tracked into vocationally-oriented CAAT's [Colleges of Applied Arts and Technology] where they primarily train in female dominated programs for placement in sex-segregated occupations. The situation of women in universities is no different. Sex stereotypes occur and women are still attracted to programs such as household sciences, nursing...in so far as these programs are hardest hit in times of economic recession, women are most likely to suffer the brunt of unemployment crisis. (p. 12)

Gender-role socialization is related to SES in terms of

the encouragement that young girls receive relative to young boys about proceeding to higher education. The literature suggests that generally, the lower the socio-economic position and education of the parents, the more traditional their views and the less encouraging to girls' wishes to attend higher education (Ishwaran, 1979). Other factors related to gender-role stereotyping include school socialization (Carleton et al., 1977) and textbook bias.

Participation rates in Alberta reflect national trends. Alberta Advanced Education (AAE) (1984) reported that "students from more advantageous backgrounds are more likely to attend post-secondary institutions than students from disadvantaged backgrounds. This is particularly evident with respect to the level of parental education, level of family income and parental Blishen scale rating" (p. 121). The AAE study referred to two types of accessibility. Type I accessibility is simply the provision of physical space and resources to accommodate demand without consideration of age, gender or ethnicity. Type II accessibility addresses the composition of the enrolment numbers - the representation of various groups in the population.

Native students, women and rural students increased their enrolment rates in the 10 years between 1971 and 1981, in spite of the fact that general overall participation rates in the province decreased, particularly in the university section. AAE suggested that this decrease may be

because of the high in-migration during the decade under discussion. This would inflate the population group (18-24 years) with individuals who came to Alberta for employment, rather than for educational purposes.

In terms of gender participation, in spite of the increase in the participation of women in post-secondary education, women still tend to be concentrated in traditionally female fields of study and under-represented in science and technology. In addition, women are disproportionately over-represented in the part-time category.

With respect to rural/urban mix, rural young people demonstrated lower participation rates than their urban counterparts. The ethnicity factor was characterized by variability by ethnicity with Native groups in particular identified as seriously disadvantaged in spite of their enrolment increases.

Smith (1991), using 1986 census data compiled by Indian and Northern Affairs Canada (INAC) determined that Native people in Canada are one third as likely to attend university as non-Native people, and of those Native people who do attend, less than one half will earn a degree. Transitional year programs, Native elder involvement, counselling and support programs, and outreach programs on reserves, may increase the 1.3% of the Native population with degrees closer to the 9.6% for the general population.

Hull (1990) demonstrated that a link exists between the socio-economic status of Indian families in Canada and the educational attainment of Indian children to the extent that high school graduation among the Indian population is much more sensitive to parents' SES than it is among other Canadians. The factors that Hull related to success of Indian students included language, place of residence, parents' occupation and poverty. Armstrong, Kennedy and Oberle (1990) concluded that general avenues for improving participation and success of Indian students are: (1) improving high school completion rates; (2) improving university attendance rates for eligible students; and (3) improving success among students who commence university studies.

In the case of physically challenged persons, participation rates are closely linked to physical barriers. Most physical barriers can often be removed with investment of capital funding. In tight fiscal times these barriers are often allowed to remain.

2.4 Problem Structuring/Assumptional Analysis as a Conceptual Framework

The link between assumptions and the way one views the world and behaves has interested psychologists and policy analysts alike. Anderson (1981) in a discussion of innovative psychotherapies noted:

> Assumptions are the building blocks of a person's make-up and therefore of behaviour...Assumptions guide the individual, determine what he or she will and will not do. They determine what the person expects or anticipates from self and others in any situation. (p. 779)

It follows that an analysis of assumptions is a valuable policy planning tool, for as Anderson further points out "the better one understands one's assumptions, the better one can begin to change behaviour and thus avoid trouble" (p. 781).

Dunn (1981) designed a problem structuring framework for conceptualizing policy problems. If the problems are ill-structured, and if there is a suspicion that underlying assumptions might have been or are liable to be misunderstood, a procedure within this framework called assumptional analysis is recommended. The application of assumptional analysis is essentially a dialectical model of analysis that challenges underlying assumptions in an attempt to reconceptualize the problem(s) to be addressed by the policy action. Assumptional analysis restructures the problem and suggests alternative policy solutions.

March (1965) had pointed out that ambiguity and uncertainty are the norm within the internal environment of organizations, not certainty and predictability. By their nature, educational institutions could be expected to face at least as much uncertainty and ambiguity internally as organizations in general. Moreover, the external environments of educational institutions are particularly

characterized by change and turbulence (Duncan, 1972; Morrison and Mecca, 1989). With respect to institutions of higher learning, Morrison and Mecca (1989) noted:

> The turbulence in higher education's external environment challenges the capability of the decision makers to effectively anticipate changing condition.... An administrator's analysis of the organization's environment is critical in accurately assessing the opportunities and threats that the environment poses for the institution and in developing the strategic policies necessary to adapt to both internal and external environments. (p. 354-55)

Dunn (1981) would add that a further task of the administrator is to properly distinguish between issues and problems. Policy issues not only involve disagreements about courses of action but also reflect competing views of the very nature of the problem (definition, classification, explanation, evaluation). Having made the distinction between issues and problems, the administrator must carefully and clearly formulate a problem or series of problems. As Dunn noted "Policy problems are unrealized values, needs or opportunities which however identified, may be attained through public action" (p. 98). A clear conceptualization and formulation of the problem(s) is critical according to Dunn because failure to do so has caused many policy analysts and policy makers to fail because they have solved the wrong problem rather than finding the wrong solution to the right problem.

If only educational institutions could keep a clear distinction between internal and external environments, this

would reduce the uncertainty and complexity of the problem. Although many policy makers have assumed such a clear distinction, and have created policy as if this was the case, they have undoubtedly committed the error as outlined above, because this basic assumption is simply incorrect. The literature is clear that the educational institution is inseparable from the external environment (Chaffee, 1985; Hombrick, 1983; Ratsoy, 1980). Weick's (1976) description of educational institutions as loosely-coupled systems which clearly stressed the iterative social relationships between the educational institution and the external environment, is now generally accepted.

Whereas linear, rational, sequential models of problem-solving may be useful in a tightly-coupled organization or one in which the boundaries to the external environment are not permeable, to use this approach with complex educational problems would likely lead to the formulation of the wrong set of problems. Rein and White (1977) advised:

> It is not clear problems but diffuse worries, that appear .... there are signals, then, of a problem, but no one knows yet what the problem is .... in other words, the situation is such that the problem itself is problematic. Policy analysis contains processes for finding and construing problems, it involves problem setting in order to interpret inchoate signs of stress in the system (p. 262)

Dunn (1981) described problem setting as "problem structuring" and agreed that policy problems tend to be complex. He suggested that the nature of the complexity has

four elements: (1) interdependence of policy problems; (2) subjectivity of policy problems; (3) artificiality of policy problems; and (4) dynamics of policy problems. These complexity components do apply to problems with respect to access to post-secondary education. Problems in the area of barriers to access are *interdependent*, for example, socio-economic barriers cannot be viewed as discrete from financial or psychological barriers.

Subjectivity of problems applies as well, for as Dunn (1981) and Rein and White (1977) pointed out, it is not the problem as such that we actually experience, but the "problematic situation." Problems are mental artifacts that come out of the transformation of an experience through human judgement. The fact of people living in isolated geographical locations is not a barrier to education as such. Rather, it is the judgement that these people ought to have access that transforms their location into a problem.

Artificiality refers to the fact that problems are socially constructed, maintained and changed - their existence is tied to those who define them. If a stakeholder group expresses the view that the fact that identifiable groups do not attend higher education should be changed, they have made a judgement about the desirability of altering what they view as a problematic situation.

Dynamics of a problem refers to the iterative

relationship between problems and solutions and the fact that both are in a constant state of flux. This is why problems, including those regarding barriers to post-secondary education, do not stay solved.

Apart from complexity, assumptional analysis is designed to deal with ill-structured problems and if barriers to post-secondary education qualify as ill-structured problems, this procedure would be appropriate for analyzing them. Mitroff and Sagasti (1973) identified three classes of policy problems: well structured, moderately structured and ill-structured problems. Dunn (1981) considered the complexities of these three classes according to five common elements and provided a means of determining which class applied. Accordingly, ill-structured problems would (1) have many decision makers; (2) have unlimited alternatives; (3) require a dialectical approach in resolving value questions; (4) have outcomes that are initially unknown; and (5) have incalculable probabilities.

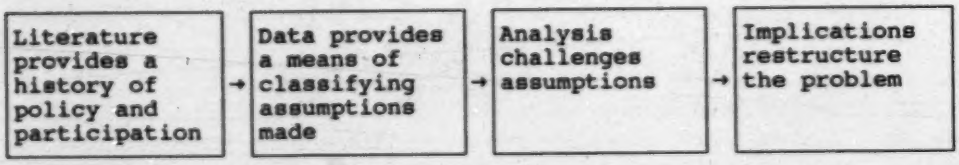
That barriers to post-secondary education qualify as ill-structured problems should not be surprising. Jenks et al. (1972) did not support the notion that providing equality of opportunity meant equality of access and noted that there was no single strategy to eliminate inequity. Rather, what was needed was a variety of specific strategies aimed at specific types of inequity (p.260). Pike (1970) viewed access as a complex issue as well, and by 1991 the

issue was clearly being analyzed as an ill-structured problem as identified by the five criteria above. Smith (1991) reflected a variety of strategies in his policy recommendations to deal with access inequities.

The University of Alberta Senate (1993) in its Task Force on Student Finance, found that strictly financial issues could not be separated from other barriers to access, and felt that flexibility on the part of policy makers is required.

Having determined that barriers to university access qualify as ill-structured problems, the assumptional analysis process would proceed to force stakeholders' assumptions to surface, challenge them and aim to reconceptualize the problems. Problem-solving approaches could then be applied to suggest solutions and policy action.

The application of this process to the access problem will proceed as follows:


Literature provides a history of policy and participation
Data provides a means of classifying assumptions made
Analysis challenges assumptions
Implications restructure the problem

Chapter III will complete the literature review and provide an historical, political, economic and sociological context for the notion of democratization of access to university level education. It will begin the process of challenging how the problem has been defined.

CHAPTER III

Ideological Shifts and Reform Movements

3.1 Introduction

The imperative to democratize access to university level education remains strong in Canada and in Alberta in spite of hard economic times. In this chapter access to university education is explored in terms of a dialectic inherent in the following questions:

1. Does the dynamic underlying the push for democratization of university access represent a significant ideological shift - a philosophical change in the view of the role of education?
2. On the other hand, does it represent a less profound cyclical reform movement?

The usefulness of the application of the ideological shift/reform movement dialectic will be explored with respect to the access issue.

Democratization of university access is a recurring vision in North American and Alberta societies. There is a public wish to believe that everyone who has the ability will be afforded the opportunity to attend university. Moreover, the public expects that once students are registered in university, no groups are discriminated against and everyone faces the same likelihood of success, given ability to succeed. The ultimate vision is that all

members of society will thereby have equal chances of success in the working world. The persistence of this vision will be pursued.

Special emphasis will be placed on educational participation as a social artifact and democratization as an ideal. Although the public has an expectation of democracy, it also has concerns about risking the quality of education in the pursuit of equality of access. Because this concern has frequently been expressed, and because it is often linked to fiscal concerns, it must be dealt with in the discussion. Equity/quality dichotomous arguments will be challenged in the debate about the efficacy of universality of educational opportunity.

A discussion of university access is only meaningful if it is taken beyond the fact of university entrance. The quality of the experience itself, as well as the results of education are natural extensions of the discussion. Equality of results as a higher order of equality of opportunity will be examined and current literature discussed.

Alberta access policy directions will be explored and evaluated, followed by policy implications and conclusions. In the end, the ideological shift/reform movement dialectic serves as a metaphor for a part of the access debate. The simplicity of the dialectic serves as a useful framework, but as direct application it, like much of the access

debate, would only trivialize a complex issue. It can shed light upon the public expectation aspects of access policy. It will be discussed in this way, as a part of the puzzle, not the complete argument.

3.2 Reform Movement

Sizer (1983) described cyclical reform movements as characteristic of a social process that could be summarized as in Figure 3.1. Intense criticism about a popular issue is often played out in the public media. For example, exposés in the 1970s about students unable to read, blamed the educational sector. Special task forces stepped into the debate, conducted research into the perceived problems and made recommendations that were aimed at the original criticisms, thus reassuring the public that something was being done about its concerns.

Carnoy and Levin (1985) described reform movements in terms of a dialectic which is inherent in the struggle between the two ideologies of democracy and capitalism. They were concerned about the changes that result from the tension between the two ideologies. The usefulness of their discussion is in analyzing educational change - especially policy change, as either a reflection of, or an agent of social change.

Fundamentally, Carnoy and Levin examined the most basic of questions about whether education is passive and follows society's lead and need, or whether education and its

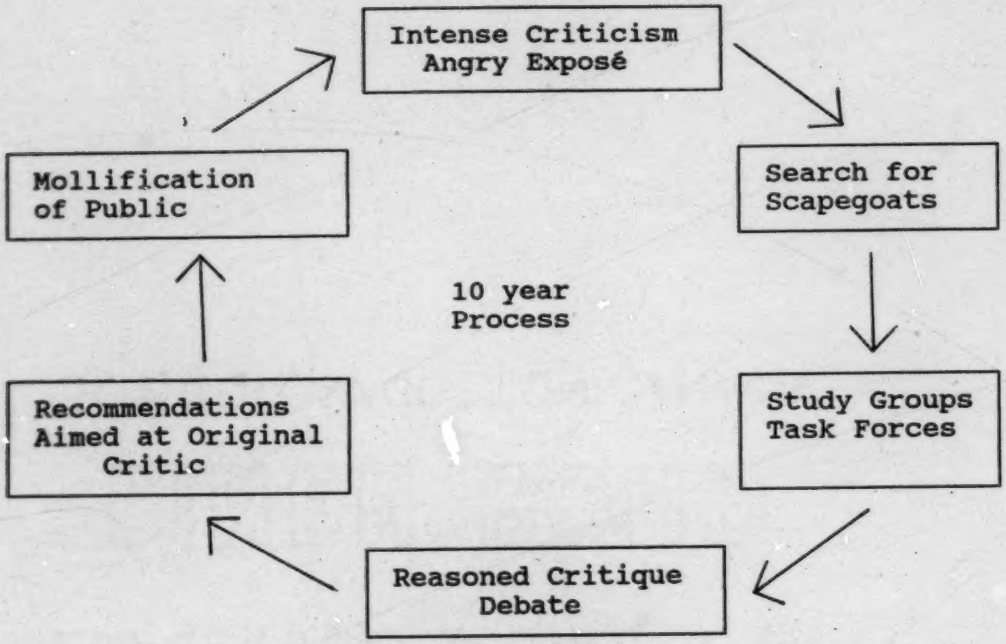


Figure 3.1 **A visual representation of Sizer's (1983) view of cyclical reform movements.**

ideology act as a change agent within society. Their theories suggested a serendipitous flow of events, directions shifting as the dominant (current) dialectic changes. They contended that "education is set in the context of social conflict and is an integral part of such conflict" (p.144). Education was viewed by Carnoy and Levin as so much a part of social conflict that they claimed that education is characterized by contradictions including (i) the political struggle for resources versus equality; and (ii) the education of democratic citizens versus the production of a workforce. With respect to the educational process of schooling they contended that "what is important

for school achievement is less the capability of the school than the characteristics a child brings from home" (p. 136).

Organizational theorists such as Baldridge and Deal (1983) supported the "unplanned" nature of change as characteristic of most organizations. Schools exist in the same societal structure as other organizations, and could be viewed as training grounds for participating in business organizations.

Serendipity notwithstanding, reform movements can be classified in terms of the type and magnitude of change that results from the effects of each dynamic when it is exerting its influence on society. Carnoy and Levin (1985) referred to small adjustments or fine tuning as "microtechnical changes". On the other hand, "macrotechnical" reforms, though still technical in nature, would exert a significant impact upon education (e.g., minimum graduation grade changes). On a political level, "micropolitical" changes have a small impact upon educational governance (e.g., student involvement in curriculum choices). As the name implies, "macropolitical" reforms suggest significant changes in the political control of education. Kilpatrick (1988), for example, characterized the so-called "back to basics movement" in Alberta as a macropolitical social reform worked through macrotechnical means (e.g., return to departmental examinations as one manifestation).

Almost all educational change or reform is essentially

a part of social reform (arguments about agent or reflection aside). Social reform movements were the subject of discussion in the social systems literature of the late 1960s and 1970s. Rush and Denisoff (1971) discussed a social movement in terms of an organized collective seeking to change some aspect of the social order. A socially defined problem is backed by a particular ideological view and where change is sought, it is argued for in terms of a solution to a problem within that ideological framework. As Kilpatrick (1988) pointed out, the media may be a potent agent in promoting the cause. He pointed to exposés in the media during the 1970s that exploited examples of children who could not read, college graduates who could not find employment, etc. as indicators of a need for "back to basics". Furthermore, scholarly studies and criticisms such as Coleman (1966) and Jenks (1973) were inappropriately used to add an intellectual aspect to the argument. A decade later Bastien et al. (1985) reflected about the legacy of this reaction: "In too many cases, excellence has become the codeword for retrenchment in public education, signalling a retreat from egalitarian commitments and from public responsibility" (p. 4).

Smelser (1968) explained the dynamics of how a concept, mythical or real, can spread and become internalized within a society. Expressed in social systems terms, ideas are generalized within subsystems of a society, and

disharmonious elements are simply re-defined to present a consistent view of the world. This continual re-defining may cause the original focus of the movement to shift opportunistically as it picks up, snowball fashion, current and related issues.

3.3 Ideological Shifts

Recent discussion of just what ideology means requires a digression at this point. The terms ideology and dialectic are used frequently in social science discussions and are very much a part of the popular language in discussions of education. Some clarification is therefore prudent.

Allan Bloom (1987) cynically traced an evolution of the term ideology. Bloom, though others would disagree with his attribution, attributed the term to Marx who described ideology as that false system of thought elaborated by the ruling class to justify its rule in the eyes of the ruled, while obscuring the real motives. Bloom proceeded to suggest that Lenin first spoke of Marxism itself as an ideology and the word evolved to the point where in popular usage today is equated to "values". Bloom summarized thus:

> The evolution of the term was made possible by the abandonment encouraged by Nietzsche, of the distinction between true and false in political and moral matters....In short, ideology became identical to values. (p. 219)

Indeed, A Dictionary of Modern English Usage (1965) suggested that ideology is a useful word because it is "free

from the religious associations of faith and creed, for belief in those politico-social systems vaguely indicated by such words as democracy, socialism, communism, and fascism, which excite in their adherents a quasi-religious enthusiasm" (p. 261). The notion that the word represents a search for the ideal, makes it that much more appealing. In common usage, it is now used to represent a body of beliefs and attitudes, a sort of value-guided way of viewing the world, often with a political aspect, but not always. In this paper ideology will be used in the sense of a body of beliefs exemplified by a way of viewing the world that could be described in behaviourial terms. The term dialectic will be used as a form of argument in which contradictions are resolved by a process of synthesis.

Sizer's (1983) ten-year cyclical reform conceptualization might well take into account Carnoy and Levin's (1985) micropolitical trend dialectic, but the more profound macropolitical trend could not be fully explained in this cyclical way. Rather, an ideological shift may be at play, perhaps dealing with as fundamental an issue as the role of education in society. If a shift takes place in such an overriding ideological perspective, the dynamics within this context - the smaller issue dialectics, take on a new focus. For example, some educational futurists (e.g., Pereleman, 1976 and Ferguson, 1980) described an ideological shift from a so-called "hard world" view to a "soft world"

perspective.

A hard world view was characterized by narrow-mindedness, dogmatism, technological fatalism, reactive responses, irresponsibility and acceptance of violence. On the other hand, the soft world perspective was characterized by holistic thinking, flexibility, acknowledgement of complexity, projective responses, technological scepticism, responsibility and peacefulness.

However, Bastien et al. (1985) in responding to the back-to-basics "excellence" movement in the United States, cautioned against a simplistic, polarized view of schooling issues. "The call for a tougher school regimen entraps the debate over change within a hard versus soft polarity, as if our choices are only more or less rigor, high or low standards, punitive or permissive incentives" (p. 64).

The universality of access to university level education is an imperative that does not seem to go away. Indeed, educational policy makers in Alberta were particularly preoccupied with the subject. An analysis of the dialogue might provide policy makers with direction. Is this recurring preoccupation with access an artifact of a change in world view? Is it a recurring cyclical movement? Are both of these perspectives too simplistic to explain the phenomenon? To understand these dynamics is important because as Bastien et al. (1985) cautioned, "whoever shapes the definition of the problem will also shape the solution

pursued" (p. 13).

3.4 The Imperative of Democratization of University Access

Cormer (1985) in discussing equity in public education suggested:

> If we do not reopen the dialogue around school improvement, we are headed for the usual cycle events in education - the identification of a problem, a "movement" to attack the problem without an adequate analysis, a problem-solving approach that fails, disillusionment and hopelessness about public education. (p. 17)

The imperative of democratization of university access as evidence of an ideological shift, is an appealing notion. In the light of a hard world/soft world dialectic, compelling arguments can be made. The movement for increased access to university level education began in earnest in the 1960s. Few would disagree that the 1960s represented a decade of change stressing process rather than content, emphasizing flexibility and understanding. However, some might question the extent and nature of the changes actually achieved.

Secondary education in Canada expanded with grade 12 enrolment increasing from 36.4% in 1961/62 of that grade 11 cohort to 71% in 1971/72 (Tomkins, 1986). High school graduation became the norm in terms of expectation. In Alberta by 1974/75 60% of those who entered senior high school, completed with a diploma and 31% with matriculation. Of the matriculation graduates, 27% (or 10% of those starting in grade 1) went on to university or college

(MACOSA, 1977). This participation continued to improve throughout the 1980s as 60% - 65% of all students registered in grade 12 participated in the matriculation program (Alberta Education Annual Reports 1981 - 85) and approximately 40% of these went on to university or college (Statistics Canada, 1985).

Economic expansion during the 1950s and 1960s reinforced the educational expansion and the expectation that each succeeding generation should have a better standard of living than the preceding one. Kilpatrick (1988) suggested that as the economy turned sour in the mid-seventies, a pragmatic social mobility attitude characterized a shift away from the openness of the 1960s. Numerous polls (Gallup, 1984; Secondary Education Review, 1984) clearly indicated that parents, teachers and non-parent adults alike expressed the view that the primary reason for obtaining further education was the financial reward associated with "a good job".

Sizer (1984) pointed out that in spite of the reform efforts, the high school had really changed very little over the century. Bastien et al. (1985) also felt that the so-called egalitarian decade was, in fact, a myth. As indicated earlier, they claimed that the press for change did not go far enough, that all that occurred was that exclusive meritocracy was simply exchanged for inclusive meritocracy. Kilpatrick (1988) suggested that the net

effect of the "back to basics" reform in Alberta is likely to be elitist, and reduce access to post-secondary education.

At first glance, the push for democratization of university access would appear as a cyclical reform movement in Sizer's (1983) terms. However, there has been a persistence, a continuity in the demand for such democratization. Though the demands have been for "equality of opportunity", the public really expected evidence of equality of results. Student financial aid was expected to encourage non-participating groups to attend university, not simply to make attendance by middle class students more comfortable.

In spite of economic downturns the imperative to democratize university level education will not go away. The public will not be mollified with respect to this issue and educational planners seem determined to achieve greater equity too. Perhaps the ideological shift from a hard to a soft world view is in evidence. Certainly, the narrow, hard world view of education as a sound human capital investment is now viewed as too simplistic. A softer world view would see democratizing university access in a more holistic fashion - a view of this democratization as the hallmark of a more enlightened society. Moreover, education is seen as a means by which the individual can control his/her environment, rather than simply react to it.

The reform movement versus ideological shift debate might well be an artificial one. Coleman (1990) pointed out that norms of equality are time and space specific. He noted:

> Norms arise when one actor's action imposes negative externalities on a set of others, who then come to hold the proscriptive norm ...Prescriptive norms, to encourage the action, arise when the action imposes positive externalities on those who come to hold the norm. (p. 12)

By this conceptualization, the norm of equal opportunity would be a prescriptive norm. By extension, norms of equal opportunity would be characteristic of a highly individualistic society. A cyclical pattern may occur with periodic bursts of individualism, but in order to sustain the norm, each member of the social system must be able to imagine him/herself in anyone else's circumstances.

Now we must examine some concepts of equality of opportunity and the underlying assumptions that give rise to policy decisions. For example, historically, three assumptions of equality were:

1. Free schooling will eliminate economic sources of inequity.
2. A common curriculum will close the gaps in opportunity.
3. Opportunities lie in exposure to the common curriculum. The obligation to use the opportunity rests with the student.

A growing call for equality of results is appearing in the access literature. Whether this represents a shift in

ideology or simply a recognition of the effects of schooling is a moot point, but as Coleman (1990) noted: "this shift in responsibility follows logically from the change in the concept of equality of educational opportunity from school resource inputs to effects of schooling" (p. 30). More succinctly put, the main issue is "the question of whether such equality implies equality of input school resources or equality of results of schooling ... neither inputs nor outputs is viable when taken at the extreme" (p. 63).

Coleman's suggestion about the persistent influence of the family background upon school achievement has strengthened over two decades. The relative importance of the social composition of the school, sense of control over environment and the relative unimportance of school facilities and curriculum, lead inevitably to the conclusion that schools must free student achievement from the home environment. The schools need to empower if they are to achieve equality of results. Ideologically, they must resist the natural tendency to allow the school to replicate the existing social order.

Smith (1991) recommended that the following action is required:

> Since cultural and family barriers probably require an outreach approach, the Commission recommends that, at least as an initial experiment, universities consult with local school boards to create outreach projects for provincial government funding. Such programs would identify students in grades seven to nine with academic potential but with socio-economic difficulties. A

> designated person would be assigned to meet periodically with the student and his/her family in order to encourage expectations in the direction of higher education. (p. 96)

Since the scope of equal opportunity norms is determined by the scope of the authority whose policies are at issue, it is becoming clear that democratizing access to university level education is a social issue rooted in schooling. It follows that policy directed at university aged individuals or post-secondary institutions, would not be expected to have an impact on participation rates in any meaningful way ... and it has not.

3.5 Educational Participation as a Social Artifact

There seems little doubt now about the impact that the social setting has upon an individual's view of him/herself as a student. Initiatives that have been successful in improving participation rates of an identifiable group have characteristics that provide hints to policy makers.

For example, in Alberta as elsewhere, native people are generally under-represented in university-level education. The fact of an open university such as Athabasca University (AU) was not enough to change this under-representation. Athabasca University, having decided that this group was part of its mandate, had to examine its own "ways of doing things" and take extraordinary measures to have an impact. It did not just happen, a concerted effort was required - a prescriptive norm in Coleman's (1990) terms. The

essentially print-based, home-study model of delivery that is AU's mainstay, was not appropriate for this group. The oral tradition of this group made the print-based materials inappropriate by themselves. The home-study model with student at home, alone with the course package with telephone access to a tutor, simply did not work.

Program planners met with native groups to find out what they needed. It appeared that they needed group, paced, instructed course delivery in a supportive environment within their home communities. Four years later, over 750 registrations per annum at AU represent native students taking AU courses in classroom format in their own communities (Oddson and Ross, 1991). In 1988 10% of the AU graduates were native students from Blue Quills First Nations College, Sunrise Project, Slave Lake and Yellowhead Tribal Council. Tribal councils and Band Councils provide the cultural support required. In some cases certificate programs are provided to meet a particular need. For example, the Health Development Administration Certificate program was designed as a 60-credit university certificate program to prepare native health administrators for the time when the federal government passes health care responsibilities to the band level.

This is a clear example that economic solutions, for example, simply providing increased opportunities (e.g., an open admission university) are not enough. Rather, the

issue is a sociological one and the social context must be examined and addressed.

The under-representation of women in particular fields and levels of study are clearly linked to social and family issues, for the provision of spaces has not been successful in encouraging women to venture into these areas. Once again, treating the issue as an economic one prompts policy makers to attempt to address the issue by freeing up scarce resources. Since the problem has more to do with power and control, these economic solutions will not, and have not worked.

3.6 The Equality/Quality Dichotomy

In any discussion of equality and equity, whether it is employment equity or educational equity, the equality/quality dichotomy is raised and is represented simplistically as demonstrated in Figure 3.2. This discussion is often framed in expressions such as "I am all for equality but we can't sacrifice quality." This is another example of an oversimplification that is, in the end, not useful. It does not add meaningfully to the discussion. Nonetheless, in hard economic times, it is prevalent and must, therefore, be addressed because funding is often seen as the trade off between access and quality.

The relationship among quality, financing, and accessibility may reasonably be described in economic terms only when access refers to absolute numbers of students. At

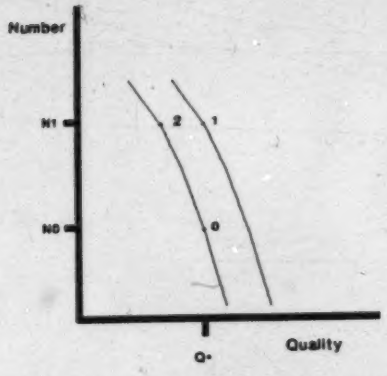


Figure 3.2 **An economic model demonstrating the relationship among numbers of students, quality, and funding: from Leith (1985).**

a given resource level (budget) a given number of students can be served to a particular level of quality.

The economic model requires some assumptions to demonstrate the relationship among quality, financing, and accessibility. One of the major assumptions is that quality can be collapsed into some sort of composite factor. In fact, quality includes many elements, some inherently immeasurable and some which have measures of questionable precision. A further complication about the quality factor, is that the quality of a university is often measured in terms of inputs such as numbers and reputation of faculty, research investment by industry, size of library, etc.; rather than by outputs such as student success, independent measures of quality, and so on.

Assuming that some sort of composite factor

representing quality is possible, an economic model of the relationship would appear as in Figure 3.2, and is often represented as this downward sloping curve. Leith (1985) refers to this model as the "quality/numbers tradeoff" (p.62). The desired level of quality is represented by Q* and the downward sloping curve represents a fixed funding level. As numbers of students rise, given a fixed budget, level of quality decreases.

From a policy point of view, if the decision is to accept all qualified students and maintain quality levels, then the budget must expand (from 0 to 1 in Figure 3.2). To some extent, this happened in the growth period of the 1970s. If the desire is to accept all qualified students but maintain a fixed level of funding, then the quality will decline (from 0 to 2 in Figure 3.2).

In tight fiscal times the policy makers' dilemma is deciding which factor should be the policy focus, and which the outcome. For example, if the policy focus shifts from accepting all qualified students to establishing a level of quality desired, if the desired quality level is Q* in Figure 3.2, and the budget is fixed, the numbers are an outcome; that is, the size of the student population is a consequence rather than a policy choice. If the policy makers set the desired quality (Q*) and a desired level of student enrolments (say N1), then the budget level is an outcome, rather than a policy choice. In hard economic

times, it would not be generally accepted that funding levels be a consequence in this way.

The conclusion is that the three variables are interrelated and the policy maker in recognizing this, could reasonably devise a policy that establishes the quality desired and the number of students the government is prepared to fund. This would avoid unintended outcomes or consequences. A related variable is the capacity of the system, but this too can be addressed within the economic model.

This model only addresses absolute numbers of students (Type I accessibility) not the nature of the groups represented by those numbers (Type II accessibility). The latter cannot be examined solely within an economic model. Rather, to understand the relative participation of various groups in university level education, one needs to examine the circumstances that give rise to participation or non-participation.

Bastien et al. (1985) addressed a paradox in North American education. On the one hand our rhetoric encourages universal access, but on the other it encourages competitive performance. The assumption, of course, is that inclusion constitutes opportunity. If a student does not display merit (ie., does not meet minimum standards) he/she has "chosen". Bastien referred to this as the "invisible hand of competition." Another underlying assumption of this view

is that equality encourages mediocrity. Bastien et al. noted emphatically:

> We reject the premise that tradeoffs between excellence and equity are inevitable; instead, we see excellence and equity as irreducible conditions of each other. (p. 31)

Bastien et al. did not take a position that defends reform movements of the past, for they felt that these did not go far enough. These movements, according to Bastien et al., simply added new layers of educational credential expectations, devaluing the lower credential levels. The so-called corrosive egalitarianism that conservatives complain about, simply did not occur, in Bastien's view. Bastien claimed that all that was gained from a decade of social activism was "essentially a shift from exclusive meritocracy to inclusive meritocracy" (p. 49).

3.7 Alberta Access Policies

There is some evidence that provincial governments manage the size of the workforce and the size of the student population. For example, Kodikara (1986) provided evidence using provincial government statistics that the province of Ontario maintain the university population at a specified percentage level in relation to the general population. Manipulations such as altering university and college entrance requirements have occurred from time to time in all Canadian provinces.

Alberta has sent contradictory messages.

Microtechnical reforms apparently aimed at restricting university entrance have been implemented since the early 1980s. Increased entry requirements by Alberta's two largest universities, re-implementation of departmental exams, and raising of passing marks are some examples. At the same time, Alberta Advanced Education continued to examine participation rates and endorsed the notion of democratization of post-secondary education (Participation Patterns Study, 1984; Trends and Issues in Post-Secondary Education, 1989; Goals and Priorities: Post-Secondary Education, 1989; Responding to Existing and Emerging Demands for University Education, 1990; Tuition Fee Policy Review, 1990).

This paradox results because government policy is attempting to satisfy both the dynamics of the social reform movement as well as the dynamics of the capitalist reproduction mode. For example, in Alberta two discussion papers were distributed for comment within months of one another. One paper dealt with accessibility to post-secondary education while the other dealt with tuition fees. It would appear that Alberta Advanced Education was seeking a way to increase student fees while not adversely affecting accessibility.

Although there is little empirical evidence for the claims that there is an inverse relationship between tuition fees and participation, Stager (1984) suggested that an

increase of 10% in tuition fees would result in a decrease of only 6% in enrolment. There is evidence that disadvantaged groups would be disproportionately affected by such a move.

The very fact of these discussions implies that governments (including the Alberta Government) have accepted an ideological shift that it now feels it may not be able to afford. The question is whether this will be followed by a shift to a more comfortable ideology or fundamental change in the way we provide education. It may be that the meta-value position of equality of opportunity will force a re-examination of the educational process. In spite of fiscal restraint, governments, including the Alberta Government, are not willing to let go of the access vision. The democratization imperative, though it has been elusive, is now firmly fixed in the popular psyche and the political agenda.

The challenge for educational planners and policy makers is to find a way to achieve potential democratization in the current fiscal climate. The sceptics who suggest we cannot get there from here are only partly right. In fact we are already there, ideologically ... in our heads and in our hearts. To achieve the outcomes we wish, we need to examine our assumptions very closely. We need to ensure that the right problem is being addressed.

It now appears that the lack of participation in post-

secondary education is a social construction. It is a social manifestation of the dynamic between home life and schooling. It seems clear, then that policies framed in a "higher education" environment will not address under-representation by particular groups. For example, the provision of resources by Advanced Education aimed at the access imperative (e.g., an open university in Athabasca; five educational consortia around the province [reduced to four in 1992]) represent a will to address the issue. However, to accept that the facts of openness and geographical presence are enough, is to accept the limited "equality of opportunity" approach. Acceptance of this approach blames the non-participant for opting out, denying the presence of barriers to participation.

As indicated earlier, non-participants can be encouraged if their participation is placed in a social context - their social context. However, far reaching changes in terms of democratizing access to post-secondary education require the recognition of the influence of the home and school dynamic. Politically, departments of education and departments of higher education (in Alberta, Alberta Education, and Alberta Advanced Education and Career Development) need a joint means of addressing the issue.

3.8 Implications

Acccptance of the access issue as a social one embedded in family and school life provides a policy direction and a

focus for action. In this regard, arguments against a neo-conservative retrenchment to an economic, technically focused model are convincing. Bastien et al. cautioned:

> Neo-conservative prescription for change focuses narrowly on technical approaches and on reward-and-punish models of motivation. It confuses quantity with quality, calling for more uniformity, more promotional barriers, more tests, more homework, more time on task, more discipline. (p. 64)

This conservative reaction only entraps the debate in a hard versus soft polarity, artificially limiting our choices to more or less rigor, punitive versus permissive incentives and so on.

Moreover, an acceptance of the family/school aspect, recognizes that policy action aimed only at higher education institutions and groups will not have an impact on post-secondary participation rates. A cooperative approach by both the department of education and the department of higher education is one that is more likely to address this social issue.

Conservative, elitist approaches that encourage competition and focus on meritocracy, have disenfranchised those groups that have traditionally been under-represented in higher education. Constituent groups, frequently referred to as stakeholders, must be identified and empowered. At the same time that reformers cannot congratulate themselves for the egalitarian movements of the 1960s for they did not democratize access, conservatives

cannot blame these movements for so-called egalitarian corrosiveness for the movements were too ineffective to be thusly accused.

Politically, to resist the economic imperative is difficult, but apparently necessary if democratization of access and results is the objective. All levels of government in Canada have conducted studies about participation rates. Alberta Advanced Education and Career Development (AAECD) recognized the distinction between an increase in absolute numbers of enrolments and increases in participation rates of traditionally non-participating groups.

As mentioned previously, in its Participation Patterns Study (1984) AAECD recognized the former as Type I accessibility and the latter as Type II accessibility. This was an important contribution of the Participation Patterns Study because the distinction is critical in examining the relative non-participation of particular groups. Care is required to be clear about this distinction in developing a position and subsequent policies regarding access to higher education.

Some general implications appear and may be useful in preparing to challenge some of the assumptions underlying policy aimed at addressing university access issues. Some of these implications include the following:

- the need to recognize the persisting importance of

family and social context in educational participation;

- the need to recognize the importance of the social composition of the educational setting;
- the need to recognize the social relationship between teachers and students;
- the need to recognize and capitalize on the fact that control over one's environment is strongly related to achievement;
- the need to recognize the relative unimportance of curriculum itself and school facilities;
- the need to de-emphasize competitive aspects of learning stressing social skills and reasoning skills, examinations of values, etc.;
- the need to recognize that economic realities do not justify or lead inevitably to a need for a tighter regimen;
- the need to recognize that since equality norms tend to arise in highly individualistic social systems, where each member is able to imagine changing places with anyone else, these conditions can be created in educational settings;
- the need to recognize that the equality/quality dichotomy leads to an over-simplistic inappropriate conclusion;
- the need to recognize that exposure to opportunities with the obligation to use the opportunity resting with

the student, implies a passive educational institution that cannot promote democratization;

- the need to pursue sociological solutions to access.

These implications were arranged in order from a broad sociological perspective of schooling and education, to tentative policy challenges to be pursued throughout the thesis. The first six implications provide a sociological context, while the remaining five begin to hone in on policy challenges as such.

With these recognitions, a policy direction begins to emerge. Some of the characteristics of that direction would included the following:

- the departments of education and higher education have a shared policy focus for action;
- social context and stakeholders would be considered in policy actions;
- teacher education policy would address social context at least as much as curriculum;
- competition would be de-emphasized in standards;
- economic imperatives and manpower planning would not drive educational policy making;
- simple solutions implied by the equality/quality dichotomy would be resisted;
- educational institutions would be encouraged and resourced to be active in seeking out community needs.

In summary, there is a sense from the literature review

that the access problem may have been misrepresented historically. The importance of political, and especially sociological, aspects have become apparent in chapters II and III. These aspects, and their importance, suggest that a re-conceptualization of the problem might be a productive means of addressing the problem.

If the problem has been viewed by policy makers as an economic one, then economic solutions involving the distribution of scarce resources would characterize policy development. If this view was essentially incorrect, these solutions would not have been successful. If the problem is more correctly viewed as essentially a sociological one, one of distribution of power, influence and control, solutions would be quite different and would lead policy development in a different direction. Solutions would involve empowerment, tying solutions to a social context.

Chapter IV will outline a methodology for restructuring the problem and analysing assumptions. Chapter V will describe the application of this process to the access problem.

CHAPTER IV

Methodology

4.1 Introduction

There were two main data sets, hence two broad levels of analysis were required. One comprised trend analysis of university participation data in Canada and Alberta, the other consisted of an assumptional analysis of stakeholder assumptions. In all, the analysis will consist of four sections associated with four areas suggested by the literature. This analysis is summarized in Figure 4.1.

Participation rate data provided by the Canadian and Alberta Government documents as well as sociological writings provide the basis for trend analysis that, in turn represent the "problem sensing" information. Federal data are found in Ahamed et al., 1976; Anisef, 1985; Anisef et al., 1980; Anisef et al., 1982; Breton, 1970; Breton, 1972; Clark et al., 1969; Curtis and Scott, 1979; Gilbert and Auger, 1988; Harvey, 1977; Horn, 1984; Ishwaran, 1979; Johnstone, 1969; King, 1983; Leslie, 1980; MacKinnon and Anisef, 1979; Norbert, 1989; Pike, 1970; Pike, 1978; Porter, 1965; Porter 1979; Rabinovitch, 1966; Sheffield, 1981; Skolnick, 1984; Secretary of State for Canada, 1988; Statistics Canada, 1983; Tepperman, 1975. Census data is used in its raw form as well as special compilation by

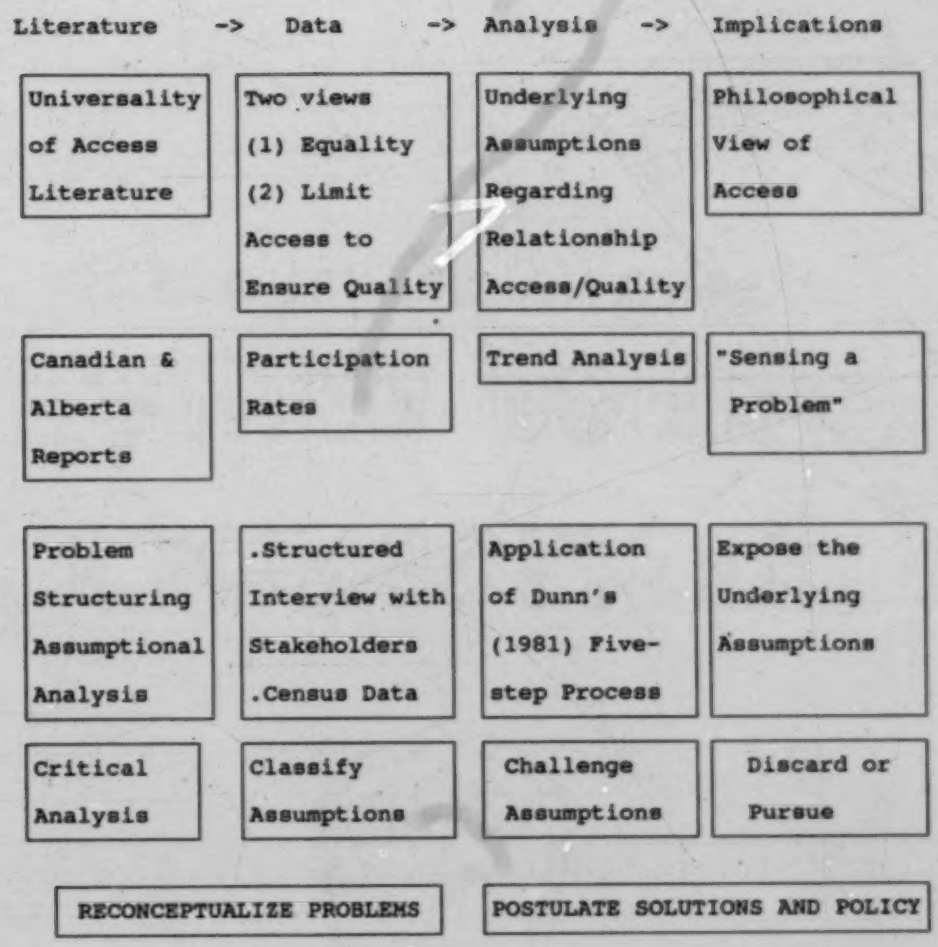

Literature -> Data -> Analysis -> Implications
Universality of Access Literature
Two views (1) Equality (2) Limit Access to Ensure Quality
Underlying Assumptions Regarding Relationship Access/Quality
Philosophical View of Access
Canadian & Alberta Reports
Participation Rates
Trend Analysis
"Sensing a Problem"
Problem Structuring Assumptional Analysis
.Structured Interview with Stakeholders .Census Data
Application of Dunn's (1981) Five-step Process
Expose the Underlying Assumptions
Critical Analysis
Classify Assumptions
Challenge Assumptions
Discard or Pursue
RECONCEPTUALIZE PROBLEMS
POSTULATE SOLUTIONS AND POLICY

Figure 4.1 Analysis and implications as suggested by the literature and the data

Indian and Northern Affairs Canada (INAC).

Data for participation rates for Alberta will be gleaned from these sources: Ahamed and Rowley, 1991; Alberta Advanced Education, 1984; Alberta Advanced Education, 1989; Alberta Advanced Education, 1990; Berghofer and Vladiska, 1980; Smith, 1991; Stewart, 1965.

Whereas participation data provide a "problem sensing" starting point by identifying groups that have traditionally been under-represented in universities, structured interviews with stakeholders provide the means of verifying underlying assumptions that have brought about decisions and policies regarding access to university level education. Accordingly, structured interviews have been designed to elicit underlying assumptions and to attempt to organize these in a classification system that will lend itself to the application of assumptional analysis. Interviews were of a structured nature to ensure consistency of the data collection. The intent of these interviews was to elicit perceptions, attitudes and values that form the context of the underlying assumptions, and in turn, form the basis of policy.

4.2 Re-statement of Research Questions

In what ways can university participation rates of particular groups be improved by policy change based upon an assumptional analysis of university access policy in Alberta?

4.2.1 Subsidiary Questions

(1) Has the access to university problem been adequately defined in order to inform policy makers and allow solutions that will solve inequities?

(2) What groups have been identified in the literature as non-participants (or under-participants) in university level education?

(3) What underlying assumptions have resulted in policy decisions that have served to sustain barriers to university level education in Alberta?

(4) What process and outcome observations can be expected from a problem structuring approach to access policy analysis?

(5) What are the policy implications of an assumptional analysis/problem structuring approach to university access?

(6) What recommendations can be made to improve participation rates of currently non-participating (or under-participating) groups in Alberta?

(7) What areas require further research?

4.3 Appropriate Methodological Approaches

A general framework for the qualitative analysis of data was developed, guided by the work of Bogdan and Biklen, 1982; Downey and Ireland, 1979; Fetterman and Pitman, 1986; Goetz and LeCompte, 1984; Miles and Huberman, 1984; Smith and Glass, 1987; Van Maanen, 1983. The design of the interview schedule was based upon suggestions by Berg, 1989; Bogdan and Biklen, 1982; Foster and Nixon, 1975; Gordon, 1980; McCallon and McCray, 1975; Smith and Glass, 1987; Werner and Schoepfle, 1987.

In addition to Dunn (1981), the application of assumptional analysis relied upon the works of Fischer, 1980; Mason and Mitroff, 1981; Mitroff and Sagasti, 1973; Mitroff and Ernshoff, 1979; Rein and White, 1977.

The issues of reliability and validity with respect to the data collected by interview was addressed with the assistance of literature such as Guba, 1981; Guba and Lincoln, 1981; LeCompte and Goetz, 1982; Sandelowski, 1986. With respect to researcher status position, the researcher in this study functioned as a non-participant observer and the selection of individuals to be approached for information was made according to a stakeholder priority taxonomy suggested by Mitroff (1983). This assisted with external validity concerns, but particular care was taken with respect to internal and construct validity, for the notion of access is one that has been defined in a variety

of quite different ways. Attempts were made to discover if all participants were operating from the same understanding of university access. Interview schedules were designed with this in mind.

4.4 Limitations of the Study

Some limitations are inherent in the use of census data. For example, success rates are problematic because the 1986 census did not indicate whether respondents were attending school and could not be considered either successful or unsuccessful. Success rates would be understated.

Armstrong, Kennedy and Oberle (1990) were critical of the use of participation rates when Indian and non-Indian populations are compared. They pointed out that the large discrepancy in crude success and participation rates for these two groups is overstated. They reasoned that these crude rates mask important reasons for the differences, the most important of which is that denominators used to calculate these rates include persons who are not eligible to attend university. This is a problem because Indians and non-Indians do not have identical rates of success in graduating from high school.

Another limitation is apparent when considering socio-economic factors and other factors. For example, ethnicity and socio-economic factors are interrelated in analysis of participation rates for aboriginal peoples.

The study was designed to investigate the efficacy of an assumptional analysis of university access policy in Alberta with a view to making recommendations aimed at improving democratization of university access in the province. Although some of the barriers (restructured as problems) were clarified and recommendations were possible, there are other areas that will require further research and still others for which solutions are not possible.

Recommendations relied upon a means of classifying assumptions that give rise to the behaviour of the stakeholders, particularly the policy makers. Accordingly, the clarity of the classification system determined the degree of tentativeness of the recommendations. It may be that considerably more research might be required in some of the areas in order to formulate clear recommendations in these areas.

Although some attempts were made to keep a clear focus on definitions, there was variety among stakeholder definition of access. Attempts were made to be very clear about the definition that was guiding the responses to interview questions.

With respect to definitions used in this thesis, some concepts that could be viewed as "soft" were required for the analysis. For example, the expressions "liberal" and "conservative" were used to describe rhetoric or policy views. In this thesis, conservative is used in the sense of

a moderate, cautious or safe approach, meant to maintain the existing order, somewhat resistant to change or innovation. The expression liberal is used in the sense of a view open to new ideas, broadminded, open to individual freedoms, not strict or literal.

A limitation frequently mentioned with respect to university participation rates in Alberta, has to do with in-migration anomalies. It is generally accepted that Alberta is frequently the recipient of large groups of young men from other provinces seeking employment when unemployment is high in their home provinces. When this occurs, they inflate the denominator in the participation rate formula. This under-estimates participation rates since these young men come to Alberta for employment rather than study. Attempts were made to address this in data interpretation.

The access problem, and the policy actions taken to address it are ready for the application of assumptional analysis. Chapter V will apply this conceptual framework to the access problem and complete the problem structuring process.

CHAPTER V

Data Analysis

5.1 Introduction

Enrolment and participation data will be presented to demonstrate demographic patterns. The enrolment patterns of particular non-participant groups will be discussed as well as the impact of financial factors upon access. Dunn's (1981) assumptional analysis model of problem restructuring will be applied to access policy with a view to restructuring the access problem.

Enrolment and participation data sets were gleaned from Statistics Canada, Association of Universities and Colleges of Canada, Alberta Advanced Education and Career Development, Indian and Northern Affairs Canada, and other sources. Structured interviews with selected stakeholders were conducted to gain insight about their assumptions and attitudes.

5.2 Type I and Type II Accessibility

5.2.1 Type I Accessibility

Figure 5.1 illustrates the tremendous growth in enrolments in post-secondary education over the past forty years. These absolute numbers represent Type I accessibility. By 1988 there were nine times as many full time students enroled at the post-secondary level than there

were in 1951. The university population had doubled between 1940 and 1950 and doubled again by 1972. Between 1972 and 1988 university enrolments increased by 51%. By 1990 full-time enrolment in university reached 514,000, an increase of 3.3% from 1988. The rate of increase in full-time university enrolment slowed down between 1976 and 1980, then increased again at an average rate of 3.3% per year.

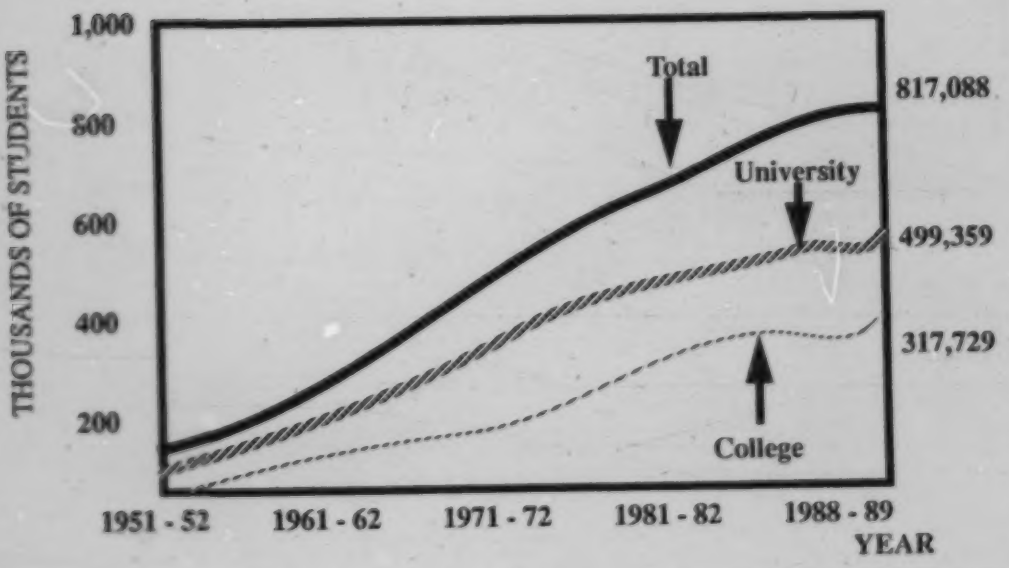


Figure 5.1 Full-time post-secondary enrolment, by level, Canada, 1951 to 1988. Source: Department of the Secretary of State, Canada (1989)

Frequently enrolment data are represented in terms of participation rates, defined as total enrolment of the relevant group divided by the total population of the group. The group usually used when discussing participation rates is the age group 18 to 24. On this basis participation rates were 10.9% in 1972, 11.8% in 1977, 10.3% in 1979 (the lowest between 1972 and 1988), 11.4% in 1982 and 15% in 1988.

Although the age cohort of 18 to 24 is normally used in discussions of university participation rates, the Association of Universities and Colleges of Canada (AUCC) collects data for the more focused age cohort 22 to 24 as well. This group increased its participation steadily between 1972 and 1976 from 6.5% to 7.10%, then dropped until 1982 when it began to rise again to 8.77% in 1988. In spite of increased participation rates among the 18 to 24 year olds, their proportion of total enrolment has declined due to demographic shifts that have resulted in a larger portion of the Canadian population in older age groups.

Alberta experienced similar growth to the rest of Canada throughout the fifties and sixties. Figure 5.2 illustrates the growth in full-time university enrolment in Alberta from 1970 to 1990. The 8.5% growth from 1970 to 1975 was followed by a 3% decrease by 1980. Similar to the national trend, Alberta rebounded in the next five years with a 37% increase. Modest increases occurred until 1989

when there was a slight decrease in enrolments. Following a 46% increase in enrolments between 1980 and 1990, a levelling off appears to be the trend for the early 1990s.

Full-time university participation rates declined in Alberta in the decade between 1970 and 1980. The in-migration demographic anomaly referred to earlier may have been at least partially responsible. As indicated earlier, during that time in-migration of the age cohort 18 to 24 was very large. These in-migrants were seeking employment, not education. Statistically they inflated the denominator in

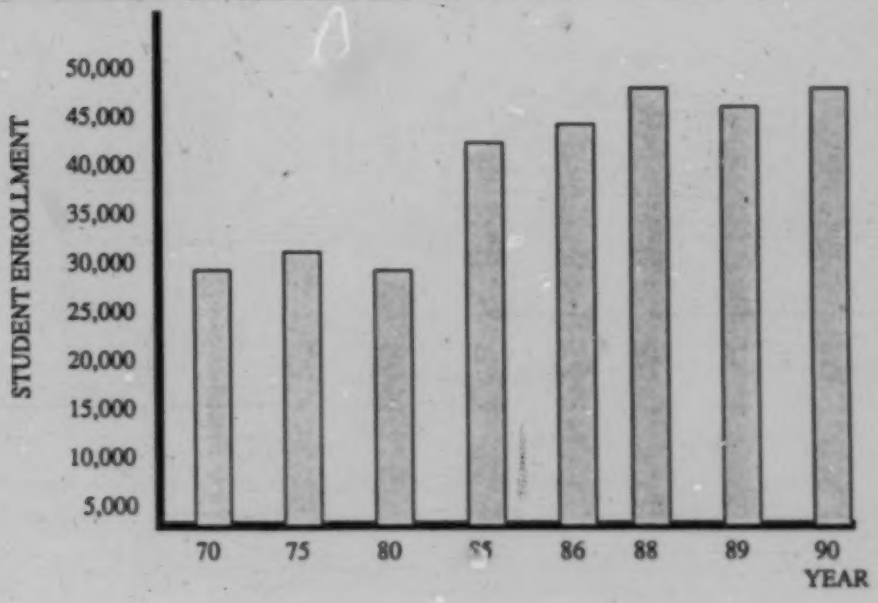


Figure 5.2 **Full-time university enrolment in Alberta 1970 to 1990. Sources: Statistics Canada (1988), Statistics Canada (1990)**

the participation rate equation to artificially reduce participation rates. Alberta Advanced Education (1984) suggested the rates would have been 3% higher if in-migrants had been factored out. Nonetheless, for the purposes of this study participation data are used to compare one group with another rather than to plot aggregate participation rates over time.

5.2.2 Type II Accessibility

The criticism that the desired democratization of access to university level education has not taken place in spite of the phenomenal growth in absolute numbers of students over the past forty years, is essentially correct. This represents Type II accessibility. The profile of university students in terms of socio-economic status (SES), gender, ethnicity, and geographical location, has changed very little in Canada and Alberta over the past three decades. By and large, groups previously identified as non-participants in post-secondary education, are still not represented, or are seriously under-represented or not equitably represented over all fields of study. This is particularly true in the case of university level education.

For example, a comparison of 1971, 1976 and 1981 undergraduates indicated that by one measure of socio-economic status (fathers with university degrees), virtually no change had taken place in the ten years. The Secretary of State for Canada report that provided this data in 1987,

expressed concern that "there has been much discussion of the fact that in spite of policies to promote accessibility to, and participation in post-secondary education, the children of upper-middle and upper-class families continue to be over-represented in the universities" (p. 9).

One measure frequently used to describe socio-economic status is the Blishen scale. It is a composite measure of the education, income and prestige of 320 occupations. For example, a Blishen scale rating of 70 and above is assumed to be a high level of education, income and prestige (e.g. doctors, lawyers). A rating of 50 to 69 represents medium education, income and prestige (e.g. middle management). A Blishen scale rating of 50 or below would be considered to represent a low level of education, income and prestige. (e.g. food services workers). Figure 5.3 illustrates the relative post-secondary participation rates for low, medium and high Blishen ratings.

Data provided by Statistics Canada and Alberta Advanced Education and Career Development indicate that when other measures of SES are used, the same participation patterns occur in Alberta as well as in the nation as a whole. University remains the domain of those from upper-middle to upper class Canadians and Albertans. Whether parental income, education or occupation is used, or any combination of these, university participation across fields of study still favours a white male from a family with a university

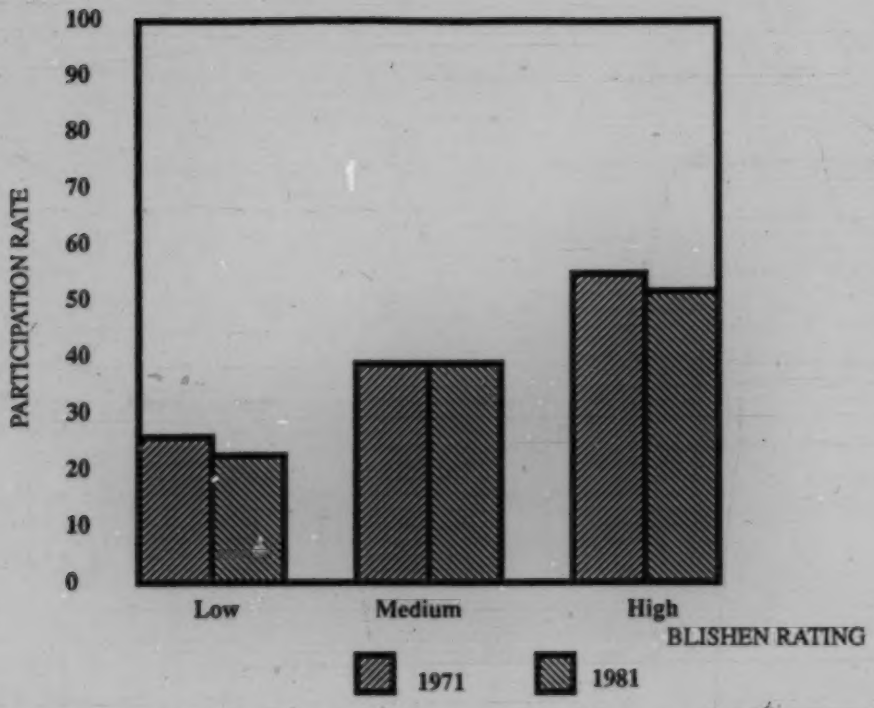


Figure 5.3 **Post secondary participation rates by Blishen Scale. Source: Alberta Advanced Education and Career Development (1984)**

educated father (mother to a lesser extent) who earns a higher than average income.

A ratio that expresses the extent of this relationship is expressed by:

$$\frac{\text{fathers of full-time undergraduates with degrees}}{\text{males in the general population of corresponding age with university degrees}}$$

A ratio of 1.0 would represent perfect representativeness. Statistics Canada census data reveal that since the mid-sixties in Alberta the ratio has ranged between 2.1 and 2.3. This ranges matches that of Canada as a whole almost perfectly. The likelihood of university participation is greater than 2 to 1 in favour of young people who have fathers with degrees. The same data source indicates that parents of college students tend to have a lower education than parents of university students.

Gender as a participation factor has experienced a somewhat different trend. In 1972/73 20,000 more men than women were enroled in university and the male participation rates stood two percentage points higher than that of women. Fifteen years later the situation had reversed. This reversal occurred even though male enrolment had increased by 12,000 and their participation rate had increased from 12% to 13.6%. Female enrolment grew by 50,000 with a participation rate increase from 9.8% to 16.4% during the same period.

Figure 5.4 illustrates a dramatic increase in university participation rates for females around 1980. There are several significant aspects of this growth. The first relates to the inconsistency of the growth pattern itself; the second relates to selectiveness of the growth with respect to field and level of study.

The growth pattern itself was not a consistent one, but

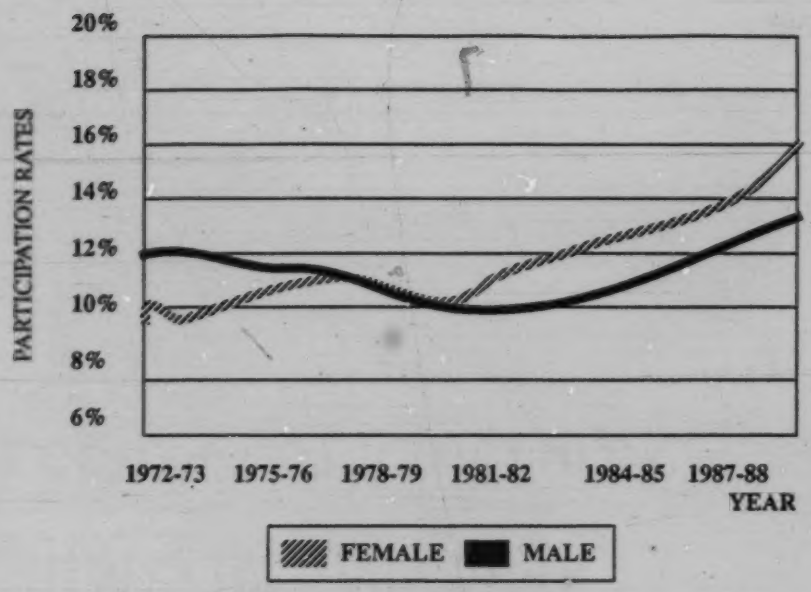


Figure 5.4 **University participation rates for males and females between the ages of 18 and 21 in Canada. Source: Association of Universities and Colleges in Canada, 1990.**

rather, happened in four distinct phases. Between 1972 and 1977 the population of both men and women aged 18 to 21 each increased by 12%. However, the increase in male enrolment was only 7%, while female enrolment increased by 23%. The effect on the participation rates was that male participation rates decreased by 0.5% and females increased by a full percentage point. The overall participation rate

remained constant at 11%.

Between 1977 and 1980, since the rate of population slowed and enrolment levels declined, the participation rate for men and women was 10.3%.

Between 1980 and 1982 the size of the 18 to 24 population peaked and both male and female enrolment had grown more rapidly than population growth. Along with higher overall participation rates, female enrolment and participation surpassed those of men.

The fourth phase, 1982 to 1990, had significant annual population declines for the 18 to 24 population, but enrolment still grew. Although both male and female participation rates continued to increase, that of women was much sharper.

With respect to female participation rates considering field and level of study, some observations are important. Growth in female university enrolment and participation followed very specific patterns.

In the case of field of study, female enrolment grew at a faster rate than that of men in seven major fields of study, such that they accounted for more than half of the total enrolment in those seven major fields of study. Enrolments in nine major fields of study are outlined in figure 5.5.

As early as 1972/73 women accounted for the majority of undergraduates in the four fields of study: education,

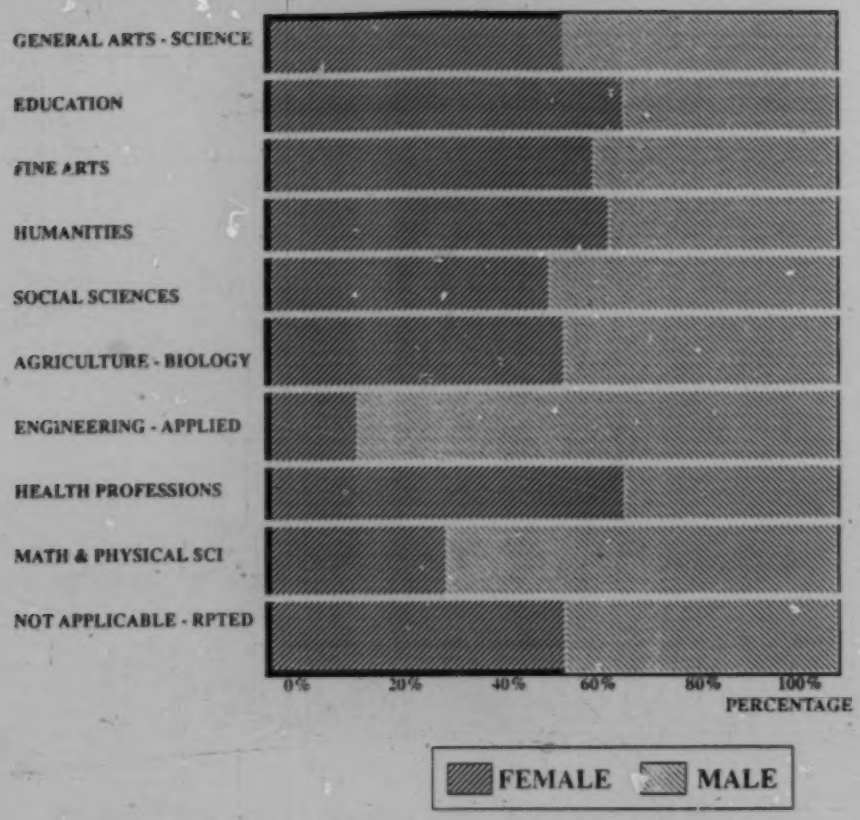


Figure 5.5 **Undergraduate enrolment full-time by gender and field. Source: Association of Universities and Colleges, 1990**

fine/applied arts, humanities and health professions. By 1987/88 women represented 60% of enrolments in these fields.

The growth in female enrolment in three other fields (general arts/sciences, social sciences and agricultural/ biological sciences) was more dramatic. In 1972/73 women accounted for less than 30% of social science enrolments and about 40% of the other two fields. By 1987/83 female

enrolment had risen above 50% in all three areas.

A quite different pattern, however, persists in the fields of engineering/applied sciences and mathematics/physical sciences. Whereas the ratio of male to female in the seven fields described previously is 3:4, in the mathematics/sciences/engineering fields the ratio was 9:1 in 1972/73 and 4:1 in 1987/88. In spite of an eight-fold increase in the number of women enroled in engineering and applied sciences, they represent only 13% of enrolments in the field and only one in 43 women choose engineering compared to one of every six men. Since 1977/78, the proportion of women enroled in mathematics and physical sciences has remained unchanged at 27%.

With respect to level of university education, during the 1970s the number of women in master's programs doubled, with average annual growth rates of 9.3%. The proportion of master's students who were women increased from 27% in 1972/73 to 39% in 1979/80. During the 1980s the growth rate for women averaged 5.2% compared to 2.8% for men. By 1987/88 the proportion of female master's enrolments stood at 44%.

The number of women enroled at the doctoral level nearly tripled from 1972/73 to 1987/88, with stronger growth in the 1980s than the 1970s. In fact, the female growth rate increases were greater in doctoral programs than in undergraduate or master's programs. In spite of the growth

in doctoral enrolments, women are still seriously under-represented in full-time doctoral studies. In 1972/73 19% of full-time doctoral students were women and in 1987/88 this had increased to 35%.

As is the case in undergraduate increases in female enrolments, increases in graduate studies by women are not distributed across fields of study in the same way as male enrolments are. In fact, the under-representation in the mathematics/science/engineering fields seen in the undergraduate enrolments is mirrored in the graduate proportions as well, only to a greater extent.

In Canada, and particularly in Alberta, the university participation of people of aboriginal origin is a significant issue. It is estimated that there are approximately 700,000 people in Canada who are of aboriginal origins, and approximately 113,400 of these dwell in Alberta. Of these Alberta aboriginal peoples, 48,700 are Indians, 64,400 are Metis and 300 are Inuit; combined they represent 5% of Alberta's population. About 66% of Indian people reside on reserves, about 4% live on crown land, and the remaining 30% can be found in off-reserve urban areas. Increasingly, the native population is becoming urban as native people move to urban centres and as populated urban areas extend to border reserves.

Nation-wide, status Indians (40% of the total) remain economically disadvantaged, with average family income half

that of the non-native population. Only 1/3 of the Indian population over 15 years of age is employed, and educational achievement levels are well below national norms. Only 1/4 of those over the age of 15 report completing high school, and 2/5 have less than grade nine education. Indian and Northern Affairs Canada, as recently as 1990 reported that 1.3% of the native population possess a university degree, as compared to 9.6% of the general population.

Based on the 1986 Census of Canada, non-Indians are three times more likely than Indians to attend university and seven times more likely to earn a degree. Armstrong, Kennedy and Oberle (1990) contended that "the poor participation and success rates in the Indian population are associated with their relatively poor high school completion rates" (p. 12). Census data reveal that only 23% of Indians who complete high school go on to university, compared to 33% of non-Indians and of those who begin university studies, 25% of Indians earn a degree, compared to about 55% of non-Indians.

Armstrong, Kennedy and Oberle (1990) pointed out that, to the extent that expected higher incomes are a factor to motivate individuals to attend and complete university, this motivator would be present for Indians since their relative gains with a university degree are greater than for non-Indians. When asked, Indian students report these expected earnings as significant reasons why they attend university.

Although the relative gains are greater for Indians with degrees, there is still a wide gap in median incomes for Indians as compared to non-Indians. Indians consistently earn about two-thirds that of non-Indians regardless of level of education.

With respect to field of study at university, Indian people have the same low participation rates in mathematics and science as women do. More than five times as many non-Indians study applied engineering as Indian students.

In Alberta, education and income levels for Indians are somewhat better than national figures, but still very low. For example, incomes are about 1/3 less than provincial norms. Approximately 1/4 have less than grade 9 education. With respect to university level education, 3% have acquired degrees and 5.6% report having taken some university course work. This compares to 10.8% and 9.9% in the general non-native Alberta population.

A demographic anomaly will have an impact on participation rates of Native people in Alberta. In Alberta the proportion of young Native people is very high. Just over 50% are under 19 years of age. In fact, projections by manpower planners suggest that in the late 1990s in Western Canada, one in four individuals entering the labour force will be of native ancestry.

In an examination of native educational achievement, Hull (1990) reported that off-reserve natives achieve a

higher level of education than on-reserve dwellers. He listed as factors of the low achievement on reserves such things as low parental socio-economic status, geographical isolation, and unavailability of education in aboriginal first languages. Hull pointed out an interesting anomaly with respect to school systems serving reserve Indian students. In the long term, band operated schools were more successful than either provincially or federally run schools. In earlier analyses this was not thought to be so because when students in band operated schools were tested, they were more likely to be behind expected grade levels for their ages. However band operated schools retain more students and have higher graduation rates.

Treftlin (1985); Oddson and Ross (1991) and others have indicated that the political diversions associated with native self government discussions have also worked to keep educational levels low. For example, the educational jurisdictional confusion as the federal government attempts to devolve responsibility for native education to the provinces, and the contention by native groups that the federal government is abrogating its responsibility, auger against much meaningful educational program development. At this point, education is too large a political preoccupation to receive balanced attention from a sociological perspective. Posturing rather than planning characterize educational discussions. This renders successful programs

vulnerable. For example, just as Blue Quills First Nations College was experiencing its best year with respect to university graduates from Athabasca University and the University of Alberta, political upheaval changed the individuals involved in planning and counselling. As a result, after a year when Blue Quills students represented nearly 10% of Athabasca University's graduates, the program was stalled for two years.

Moreover, while Indian bands attempt to gain some continuity of planning as education, health, and social services are being devolved, the federal government wishes only to negotiate with individual bands, rather than native organizations such as the Assembly of First Nations.

Oddson and Ross (1991) compiled enrolment statistics for native Albertans for the academic year 1987/88 and some of these are summarized in Table 5.1.

On the face of it, there appears to be a contradiction in the literature about the conditions likely to foster success for Indian people in university. Whereas Hull (1990) had reported that off-reserve Indians seemed to have better educational success than on-reserve Indians, recent studies have indicated that university programs provided in the native communities with strong community support, are experiencing unprecedented success (Treftlin, 1986, Oddson and Ross, 1991). Further examination reveals that historically Indians living on reserve had to travel to

Table 5.1

Full-time Students of Native Ancestry Registered in Various Alberta Post-Secondary Institutions (1987/88)

Institution	On-campus students	Off-campus students
Athabasca U	0	161
U of Alberta	149	89
U of Calgary	100	40
U of Lethbridge	77	47
AVC/CVC Slave Lake	998	194
Community Colleges	720	874
Technical Institutions	166	178

Source: Oddson and Ross (1991, p. 9)

urban centres to pursue university studies. They experienced considerably more feelings of alienation than did Indian people who were already living in urban settings. With the relatively new initiatives of bringing programs to the Indian communities, the success rates of on-reserve Indians are improving.

5.3 The Impact of Financial Aspects Upon University Participation

The data are clear about the influence that financial factors have upon post-secondary participation rates. In the twenty years since 1971 to 1991, the data have been consistent. In terms of absolute numbers of registrations, tuition fees as such have little direct relationship. Handa and Skolnick (1972) found that a 10% increase in tuition fee results in a less than 10% decrease in enrolments. In fact, they found that if tuition doubles the decrease in enrolment

is less than 10% to 15%. Anderson (1980) confirmed that decreasing tuition does not increase enrolment. Smith (1991) found that tuition only ranked a distant third in financial concerns for students behind foregone income and general living expenses. Clearly, tuition as such does not represent a barrier to enrolments. Even students from lower SES groups rank foregone income and general living costs as greater impediments than tuition itself.

The Canada Student Loans program began in 1964 and the impact upon absolute numbers of enrolments is apparent, however, there was virtually no change in the participation rates of groups which were traditionally under-represented. Gilbert and Auger (1988) reported some interesting findings with respect to financial implications for lower SES university students. They found that students from higher socio-economic backgrounds received more scholarship funding, earned higher summer wages, and tended to have higher savings. Students from lower socio-economic backgrounds were more insecure about money, borrowed more readily and were more likely to "stop out" of university.

5.4 An Assumptional Analysis of University Access Policy in Alberta

The case was made in chapter II that the problem of inequality of access to university level education is an "ill structured" problem that may have prompted policy

based on incorrect assumptions; thus this problem is suitable for application of Dunn's (1981) assumptional analysis model. Dunn cautioned administrators about distinguishing between issues and problems. Since policy issues not only reflect competing views of the very nature of the problem, but also the course of action to be taken, the problems must be clearly formulated or structured.

Figure 5.6 summarizes the problem structuring process.

Since problems are "unrealized values" in Dunn's model, the policy analyst senses a problem by adding a value to the data that indicates that certain groups are under-represented in universities. To move through the process of problem conceptualization toward the substantive problem, Dunn advises the policy analyst to "define the problem in its most basic and general terms" (p.108), for example, determine if the problem is economic, sociological, etc. Many writers agree that the problem of lack of equality of access to university education is a sociological one, not an economic one as some policy makers have assumed. Having determined this, the problem can thus be re-conceptualized and should be apprcached "in terms of the distribution of power and influence among competing interest groups, elites, and other social strata" (p. 108), not from the allocation of scarce resources as would be the case if the problem was an economic one.

There is considerable evidence that the access problem

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Figure 5.6 The subprocess of problem structuring. Source: Dunn (1981)

has been viewed primarily as an economic one. For example, the results of the implementation of the Canada Student Awards program are evidence of this. Although absolute numbers of registrations increased, financially disadvantaged students did not improve their relative position with respect to participation.

Once a substantive problem has been conceptualized, one can proceed through problem specification to a formal problem identification. This is the critical point of analysis, because if the analyst has not conceptualized and specified the problem such that there is a high degree of correspondence between the problematic situation (that the fact that certain groups are under-represented in university is felt to be a problem) and the substantive problem (that

the inequity of access is a sociological problem), the formal problem may not represent the original problematic situation. Dunn (1981) warns about "errors of the third kind: solving the wrong problem".

Dunn's assumptional analysis model is a comprehensive form of problem structuring "explicitly designed to treat ill-structured problems, that is, problems where policy analysts, policy makers and other stakeholders cannot agree on how to formulate a problem" (p.130).

The process of assumptional analysis is a five step process as follows:

1. Stakeholder identification: The identification of groups who affect and are affected by policy actions.
2. Assumption surfacing: The analyst works backwards from a recommended solution to a problem to the supporting data and underlying assumptions from which the solution was deduced.
3. Assumption challenging: The analyst systematically compares the assumptions to the recommendations and presents counter assumptions. If the counter assumption is plausible, the problem is prime for re-conceptualization.
4. Assumption pooling: Proposed solutions are pooled.
5. Assumption Synthesis: The composite set of acceptable assumptions form the basis of a reconstructed problem.

5.4.1 Phase I Stakeholder Identification

Those who affect and those affected by the formulation and resolution of the problem must be clearly identified. There is strong evidence that policy aimed at injecting equity into university access did not take into account either all those affecting or all those affected by the policy decisions. Certainly, the nature and extent of the influence of the policy was not clearly understood. There may not even have been a clear understanding of who the non-participants were, since the focus was primarily upon participants.

For example, the policy decisions held the notion that providing opportunities (i.e. expanding the number of places) would result in under-represented groups becoming involved. This did not occur because the motivations of the non-participants were not known.

Another example of misunderstanding the under-represented group is the fact that policy initiatives aimed at making university access more equitable were aimed at the wrong individuals and the wrong institutions. Since notions about whether one views oneself as "university bound" is rooted in home and schooling, aiming policy at post-secondary aged students and post-secondary institutions was questionable.

There is evidence that those affecting the policy decisions did not include appropriate stakeholder groups as

well. Such policy initiatives were taken by Alberta Advanced Education and Career Development, not Alberta Education. If participation decisions are based in home and schooling, Alberta Education has a major stake in such policy.

The priority associated with stakeholders on the side of those affecting policy appear to have been seen incorrectly as:

i) university officials

ii) Alberta Advanced Education and Career Development officials

iii) community groups (e.g. educational consortia)

The research suggests a more realistic priority list would be:

i) school officials

ii) Alberta Education officials

iii) community groups

With respect to stakeholder priorities for those affected by policy decisions, there was never any doubt that non-participants would be ranked number one, but these groups were not clearly understood and the influence of family was not taken into account.

Therefore, those involved in (affected by or who affect) the problematic situation would be ranked and a priority set as follows according to their extent of involvement in the process and degree of impact:

STAKEHOLDER	PRIORITY
Non-participant groups	1
Families	2
School officials	2
Alberta Education officials	3
Community groups	3
University officials	4
Alberta Advanced Education and Career Development officials	4

5.4.2 Phase II Assumption Surfacing

Working backwards from recommended solutions, through supporting data and underlying assumptions, one links explicit specification of a problem to each recommendation. In the case of access policy decisions, actions have been taken based on assumptions and a particular view of the literature. In order to proceed through Dunn's model, one needed to force assumptions to the surface to be challenged. This is done by working backwards from the action that has taken place. This model was applied to access policy decisions and is summarized in Table 5.2.

Table 5.2

The Application of Assumption Surfacing to Access Policy Decisions

POLICY RECOMMENDATION Increase the number of "places" available in universities. **DATA** The literature is clear that particular groups (lower SES, natives and others) are under-represented. **ASSUMPTION** That an increase in places will increase participation of these groups, and non-participation is a conscious choice.
POLICY RECOMMENDATION Increase opportunities for university access. **DATA** The literature shows a strong national will to democratize access to university education. **ASSUMPTION** That opportunity is the opposite of barrier, that providing one eliminates the other.
POLICY RECOMMENDATION Increase student loans and grants. **DATA** The data indicate that family income of these groups does not permit full-time participation, but that foregone income and general living expenses are the barriers, not tuition fees. **ASSUMPTION** That increases in financial support will increase participation of under-represented groups.

POLICY RECOMMENDATION
Encourage universality of access to university education.

DATA
The literature shows a split view: the conservative view is that quality suffers if access is encouraged, and funding is dispersed. The liberal view is that this inverse relationship is a myth.

ASSUMPTION
The conservative assumption is that universality is good policy only if it does not sacrifice quality and dilute funding. The liberal assumption is that universality is right and good for the society.

POLICY RECOMMENDATION
Enforce university entry requirements based on high school grades to ensure quality does not suffer.

DATA
The conservative literature continues the quality/quantity dichotomy argument. The liberal literature points out that the raising and lowering of entry requirements has had more to do with enrolment quotas than a desire for quality.

ASSUMPTION
That enforced entry requirements coupled with financial assistance will result in meritorious students participating even if they are from financially disadvantaged backgrounds.

POLICY RECOMMENDATION
Make investment in human capital through educational funding.

DATA
The conservative view is that unemployment and underemployment of graduates suggests a poor investment. The liberal view is that education level and future income are generally positively correlated, suggesting a good investment.

ASSUMPTION
The conservative view is that the labour market place can accommodate a finite number of graduates. The liberal view is that both the individual and society benefit from an investment in education.

POLICY RECOMMENDATION
Education should act as a social change agent.

DATA
Two views are apparent in the literature: that education reflects the social status quo; education is the impetus for social change.

ASSUMPTION
That society benefits from social change.

POLICY RECOMMENDATION
Access policies should be applied the same to all groups.

DATA
Participants and non-participants view education differently, especially with respect to how they view themselves and higher education. The decision to participate or not is a sociological construct and the social context of non-participants needs to be addressed.

ASSUMPTION
That equity of educational opportunity means that all individuals and groups must be treated the same.

POLICY RECOMMENDATION
Native students should be brought to universities and given places.

DATA
Native students brought off reserve to urban university settings feel alienated and return to the reserve. Recent literature suggests that high school completion, language and culture are major reasons for lack of participation.

ASSUMPTION
That if opportunities for attendance are provided to native people, they will improve their participation.

POLICY RECOMMENDATION
Aim access initiatives at post-secondary institutions and post-secondary aged students.

DATA
Decisions about attending universities are not made at university entrance age, but rather non-participants do not make a formal decision. Early on in schooling, non-participants begin to define themselves in ways that do not include higher education.

ASSUMPTION
That participation will increase as post-secondary institutions make spaces available or if open universities are established.

5.4.3. Phase III Assumptional Challenge

Comparing sets of recommendations and underlying assumptions, each assumption is challenged by a counter-assumption. Implausible assumptions are discarded and plausible ones are pursued to determine if they might serve to re-conceptualize the problem. Applying this systematically to the assumptions from phase II provides the following analysis summarized in Table 5.3.

Table 5.3

The Application of Assumptional Challenge to Access Policy Decisions

ASSUMPTION That increasing the number of places will increase the participation rate of under-represented groups, and non-participation is a conscious choice. **CHALLENGE** Data indicate that this is not the case. In spite of great increases in the undergraduate population, the non-participant groups have not improved their proportional representation. This policy decision made an error of the third kind - it solved the wrong problem. The problem was viewed as a distribution of scarce resources (an economic problem) and rendering the resource (university places) more plentiful was seen as the solution. An alternative assumption is that the problem is a sociological one, having to do with the distribution of power. As to the assumption that the non-participant is responsible for not taking the opportunity offered, such an individual would not be empowered to define the opportunity as appropriate for his/her use.
ASSUMPTION That opportunity is the opposite of barrier, that providing one eliminates the other. **CHALLENGE** Data suggest that the fact of increasing opportunity does not apparently remove barriers since non-participants do not view themselves as university material. In fact, providing opportunities to eighteen year olds does not assist non-participants who, for the most part, have forgone the decision about university attendance some four to seven years previously. In primary and junior high school, non-participants develop a view of their place in society and this does not include university. Usually no conscious decision as such is made (i.e. university is not discarded, it is not considered). An alternative assumption would be that the barrier is an unconscious one sociological in nature, rooted in home life and schooling. Accordingly, this barrier would be addressed in those early years, not at university entrance age.

ASSUMPTION
That increasing financial support will increase participation of under-represented groups.
CHALLENGE
Neither the fact of loans and grants, nor the extent of such assistance has improved the relative position of non-participant groups. Once again, this assumption views the problem as an economic one rather than a sociological one. An alternate assumption might address the nature of financial constraint and pursue other alternatives to loans and grants.

ASSUMPTION
The conservative assumption is that universality is good policy as long as it does not sacrifice quality and dilute funding. The liberal assumption is that universality is right and good for society.
CHALLENGE
Public as well as expert view is split. One view is that universality and democratization must be a goal. The other view is that quality and access have an inverse relationship. The result is policy that tries to satisfy both arguments and achieves neither. To rationalize the policy more research is required and data that are available should be compiled and analyzed.

ASSUMPTION
That enforced university entry requirements coupled with financial assistance will ensure participation by meritorious students even if they come from financially disadvantaged backgrounds.
CHALLENGE
The characterization of the problem as economic has been challenged previously, but there is another implied assumption here. The arbitrary nature of entry requirements has been documented in the literature and must be viewed as questionable both as a screening device as well as a factor in the equity of access problem.

ASSUMPTION
The conservative assumption is that the labour market place can accommodate a finite number of graduates. The liberal assumption is that both the individual and society benefit from investment in education.
CHALLENGE
Once again, policy makers have tried to satisfy both views. When economic conditions are such that graduates are experiencing unemployment or underemployment, the conservative view prevails. In better times, the liberal view of a higher societal base level education representing an enlightened society, prevails. Essentially, however, this casts the problem incorrectly as an economic one. The alternative assumption is to place access policy decisions within a sociological context. This does not ignore economic realities, but acknowledges that the access problem is not essentially an economic one, for economic solutions have not had an impact.

ASSUMPTION
That society benefits from social change.
CHALLENGE
Discussion on this matter invariably has to do with whether the educational sector reflects change or should act as social change agent. Since the imperative to democratize access will not go away, it would appear that if reality is to marry rhetoric, the educational sector must be viewed as a change agent, and the policy that drives it must reflect this. An alternative assumption would be that if democratization is the aim, then schools can mitigate the effects of home life that discourage individuals from viewing themselves as university bound.

ASSUMPTION
That equality of educational opportunity means that all individuals and groups should be treated the same.
CHALLENGE
This assumption simply does not acknowledge the problem as a complex sociological one, and has resulted in policy that has solved the wrong problem. Absolute numbers of registrations have increased, because the traditional participants have been assisted in participating in greater numbers. The special needs of the non-participants have not been addressed. In effect these stakeholders have been misrepresented. An alternative assumption would be that particular non-participant groups require particular policy initiatives aimed at their particular sociological contexts.

ASSUMPTION That if opportunities for attendance are provided to native people they will improve their participation. **CHALLENGE** Since participation is based in family and schooling, and since there are special cultural issues, this group requires strategies aimed at their particular circumstances.
ASSUMPTION That participation will increase if post-secondary institutions make spaces available or if open universities are established. **CHALLENGE** Availability of spaces, even open access institutions have not improved the relative position of non-participant groups. Athabasca University students usually have high school matriculation and half have some post-secondary education.

5.4.4 Phase IV Assumption Pooling

Assumptions are negotiated and priorities set in terms of importance and impact upon stakeholders. The aim in this phase is to create an acceptable list of assumptions on which to base policy that will meet the needs of stakeholders. Each assumption will be reviewed in turn.

It would appear that the fact of increasing the number of places has not democratized the university participation rates. Regardless of other problems that this expansion might have solved, it has not achieved democratization. Therefore, as a means of achieving this kind of equality, this assumption can be considered implausible and discarded.

The assumption that providing financial support in the form of grants and loans cannot be rejected in spite of the fact that in and of itself this initiative did not increase

participation rates of financially disadvantaged individuals. The fact is that absolute numbers of these people did increase though their proportional representation did not. It may be that without this support their under-representation would have been exacerbated. Since the literature is clear that foregone earnings and living expenses are the major financial concerns of the lower SES students, assistance with housing would remove a major barrier. In addition, an income contingent repayment scheme for student loans would suit this group. The point is that the basic problem of access is not an economic one, though it exists within an economic reality.

There is strong evidence that the barriers to university participation do not lie in either opportunity or funding, but rather in a more fundamental societal view of what type of individual ought to attend university. It seems that non-participants accept the view that the university undergraduate is not a person like themselves. Societal rhetoric to the contrary notwithstanding, young people in the lower socio-economic group are socialized to view their futures in such a way that these futures do not include the benefit of university education. In junior high school and high school, students must have a clear perception of themselves as "university bound" in order to be counselled into programs that permit entry to university. King and Hughes (1985) were critical of school counselling

services for their lack of attention to groups other than those who identified themselves as post-secondary bound. Once students who would not have a home life conducive to encouraging post-secondary education planning realized what was required, they were already involved in programs that were not designed for university entrance. King (1983) questioned whether community colleges are abandoning the groups for whom they were created in favour of the same group that would be eligible for university entrance. In a study of Ontario Community Colleges, students who had taken mainly general level courses in high school (i.e., not university entrance) were unlikely to attend college, and colleges would select students with grade 13 (university entrance courses) over general level students.

Similarly, women view themselves in particular ways, and these do not include science/mathematics/engineering. Native people have a complex combination of sociological barriers to viewing themselves as university students. None of the non-participant groups makes conscious choices to reject university studies. Rather, in their developing view of themselves and their futures, they simply do not consider it as an option. It is not a decision, but a non-decision.

Simple solutions based on an economic model have not proven successful in addressing democratization of university access. For example, Athabasca University, an open access institution with no entrance requirements except

age (18 years), has not enhanced the participation of non-participants in a meaningful way. Most Athabasca University students have high school matriculation and over half have some post-secondary education. Clearly these people defined themselves as participants prior to attending Athabasca University.

Although Athabasca University frees the student from barriers of time and space for learning, it does little to address the sociological barriers that keep non-participants from viewing themselves as university students. The print-based home-study model would not be expected to accomplish this.

In the case of initiatives that Athabasca University undertook that targeted the particular group - native students, there was considerable impact on this previously non-participant group. This was not a case of providing spaces, but rather addressed socio-cultural factors.

The assumptional clash surrounding the benefits of universality versus the inverse relationship between open access and quality of undergraduate study is an interesting one. The literature is clear that there is no empirical support for the notion that increased access will reduce quality. Moreover, the notion is not even logical. Surely the selection based upon potential, not socio-economic background, gender or ethnicity, will ensure quality of scholarship. To believe otherwise, is to believe that those

from higher socio-economic backgrounds, those of a particular gender or ethnic background, have a monopoly on scholastic ability. If this, in turn, is true, then a serious review of the definition of scholastic ability would be in order. If a real commitment to potential is maintained, then it would appear that the access/quality inverse relationship assumption must be discarded as elitist and illogical. At best, as indicated earlier, the economic model involving numbers of students, quality of education, and funding, deals only with absolute numbers of students. It does not address the nature of the groups participating.

The assumptions that rigorous entry requirements coupled with financial support ensure the entry of meritorious students from financially disadvantaged backgrounds must be rejected as an assumption informing access policy decision making. Having rejected the quality/access dichotomous assumption, the purpose and function of the entry requirements add nothing to the access decision making process.

Assumptions about the benefits of investment in human capital through educational funding, are on one level economic issues, and on another level perceptual ones. In the case of the former, economists are still grappling with the determinants of the costs and benefits of education in economic models. No doubt, further examination of this will be undertaken, given the preoccupation with efficiency in

education. The perceptual issue, however, may have nothing to do with economic models, for the problem is not an economic one. The perceptual issue may be about the underlying assumption of who is entitled or expected to attend university. The suggestion that the important benefits of higher education should be reflected in measurable terms such as increased gross domestic product or immediate employability of graduates at levels of income that support the view that this is an elite group, undermines the very premise of universality.

The assumption that equity means treating all groups alike must be rejected once one accepts the access problem as a sociological one. The evidence is clear that targeting particular groups with policy initiatives aimed at their social barriers, can have impact on participation rates. Successful programs for Native Canadians have demonstrated the need for this form of targeting and the effectiveness of band operated schools provided further insight about stakeholders and inclusion.

The meta-values underlying assumptions about the role of education as maintainer of the existing social order on the one hand, or agent of social change on the other, lies at the very heart of universality and presents the largest challenge to policy makers. The pessimistic view would be that this is a "wicked problem" destined for debate for generations to come. The less pessimistic view would be

that incremental changes, evolving the social order in the direction of universality would be acceptable to the status-quo proponents since there would be little change over the short run.

5.4.5 Phase V Assumption Synthesis

A composite set of acceptable assumptions serves as a basis for a new conceptualization of the problem.

The problem(s) may be re-conceptualized. The focus shifts from viewing the problem as an economic one to a sociological one. This means a shift from looking at a lack of opportunities in the form of university spaces and funding, to viewing the problem as rooted in the fact that the non-participants, along with the rest of society, have a stereotypical image of who ought to attend university. There are implications for policy makers as well as educational researchers for there is a need to address the issue of aspirations and expectations of potential university students.

Policy makers may need to take a leadership role in reconciling the rhetoric of equality of opportunity by the public and the persistent elitist view of the type of person who ought to attend university. Moreover, policy that will ensure quality and scholarship while increasing access may expose the myth of the access/quality dichotomy.

5.5 Stakeholder Attitudes and Assumptions

Structured interviews served to reinforce the notion that the problem is frequently seen as one of economics. Time and again, respondents referred to opportunities and improving ways of providing these in a cost-efficient manner. As expected, there was an array of definitions as to what constitutes improved access. In general, though not exclusively, universality of access was seen as a threat to quality.

The executive directors of all four educational consortia were interviewed. The four consortia are: Pembina Educational Consortium, Yellowhead Regional Educational Consortium, Chinook Educational Consortium, and Big Country Educational Consortium. The role of the educational consortia seemed clear in the area of upgrading, technical and clerical training, but ambiguous with respect to university level education. In most cases the role was clearly rooted in an economic model and related to employability of participants. In fact, many decisions about program funding appear to be based more upon shared-cost opportunities than upon need. For example, programs that could qualify for federal cost-shared funding received some positive reaction. These were never university level programs and were usually in the vocational/trades/clerical area.

The consortia forge relationships with local industry

and training is designed to meet their needs as well as to take advantage of special funding provided. The directors provided historical accounts of attempts to provide university level education to their constituents, most of which had not been successful due to limited numbers. The most enduring efforts in this area were university course offerings by audio-teleconference. The directors expressed concern that these programs were vulnerable to cost cutting at the institutions. Moreover, capital equipment was aging and in need of repair and replacement. This did not seem to be a priority to institutions.

The consortia directors expressed the view that the universities did not appear to place a high priority upon providing university level education to rural Albertans. One director referred to the convoluted bureaucracy at the larger universities as a barrier. Another indicated Athabasca University's (AU) decreased programming by teleconference in recent years as an indicator of lack of interest on the part of universities in meeting this particular need. There was a sense that AU had retreated from its original mandate.

A frequent comment by consortia directors was that the government and the universities had not followed through on the original consortia concept. They questioned the commitment and imagination of Alberta Universities and felt that universities had not appeared to give the kind of

visible support that is required for rural communities to believe that there is a real commitment.

Universities were not seen to be imaginative in meeting the rural community needs. Distance delivery and mixed modes were suggested by the consortia directors as ways of meeting their needs. Universities were not seen to have a commitment in this area. There was a suggestion that they should be held accountable for demonstrating initiatives in this regard, and that portions of their operating budgets should be "ear marked" in this way.

There was a general feeling on the part of consortia directors that the provincial government was sensitive to the needs of their constituents but that fiscal restraint had inhibited the follow through necessary. There was strong support for the notion of users being required to pay. Generally comments were framed within an economic model in which participants would be expected to prove their worthiness, institutions were expected to provide education in a cost effective way, and the provincial government was expected to provide leadership and a rationalization of resources. One director suggested that since tuition is not a major barrier in itself, university tuition should be uncapped by government.

One director felt that the issue was more a question of values, that access policy should not focus on opportunities, but rather on parents and children. In his

view lower SES young people simply did not see the value in university level education.

The directors indicated that their communities could not support the numbers required for on-site delivery of university courses. Moreover, they indicated that young rural people who are interested in university, want to leave their communities and go to the cities for their education. They related stories of parents who were keen to have university programs within the community lobbying for on-site delivery, but offspring who clearly wanted to venture to the city, showing little interest in the idea. In the end, attempts to provide courses failed because the young people were not behind the idea.

There was strong support on the part of consortia directors for federal government involvement in meeting the educational needs of their constituents. Some expressed the view that the distinction between education and training is an artificial one and that jurisdictional issues have fragmented the provision of education. The need for a national view was expressed.

There was originally a perception that the fact of having an open access university should address most of the access issues. Some interviewees believed that the student body at Athabasca University was composed of traditional non-participants. However, there was a growing cynicism that this was not the case.

Although most of the interviewees felt that there was a need for closer liaison between Alberta Education and Alberta Advanced Education and Career Development, this was not seen to be particularly linked to the access issue itself.

With respect to the notion of universality, some felt that we can no longer afford this luxury, but others felt that it should be held as an ideal, and that efficient ways of approaching the ideal should be examined.

Interviews with government officials indicated that the economic model is very much guiding policy. It was felt that this is a watershed time for Advanced Education and Career Development (AAECD) and its relationship with post secondary institutions. For example, an initiative involving public consultation will take place in the Fall of 1993. The initiative is called "Access Through Innovation" and has four themes: (1) accountability; (2) accessibility; (3) responsibility; and (4) affordability. The initiative is driven by the fiscal climate and the accessibility focus is upon Type I accessibility. Rooted in the economic model, the intention is to reduce "per unit costs" to allow current levels of enrolment and accommodation of the anticipated increase in demand with the "echo baby boom".

In October, 1992 Alberta Advanced Education produced a paper about the demand for post secondary education by high school graduates to the year 2005. The conclusion was that

there will be a great increase in demand both on the part of high school graduates and the labour market. A major issue identified was the mis-match between skills actually required in the labour market place and the skills being demanded by employers. High school graduates are expected to seek the higher credentials as a hedge against an uncertain job market.

The department of Advanced Education and Career Development sees its role as one of providing an accountability framework for institutions. AAECD will establish expectations and monitor institutions' results. It was clear, however, that the institutions themselves will actually do the evaluations of expectation achievement. Nonetheless, it was acknowledged that AAECD could influence performance through funding. For example, provisional three year funding might be provided for an innovative project. The institution would be expected to evaluate the project according to some pre-determined criteria. After the three years AAECD might opt to roll the funding into base budgets. It was clear in interviews that expectations, performance and consequences would be a growing area of interest to AAECD in its relationship with post secondary institutions.

Institutions have indicated to AAECD that traditionally innovation has not been rewarded, but rather punished. AAECD will examine this criticism as part of the "Access Through Innovation" initiative.

Throughout interviews with government officials, it was clear that its role was not an advocacy one for underrepresented groups. There was acknowledgement of a role in monitoring participation rates, both Type I and Type II, but that it was the role of the institutions to address inequities. AAECD officials confirmed that the **Participation Patterns Study** would not be continued. It was unclear how participation data about underrepresented groups would be gathered and made available.

Alberta Education has participated with the rest of Canada in attempting to reduce high school drop out rates. There has been some success in this regard and to the extent that lack of high school diploma has been a barrier to non-participating groups, this is a positve initiative.

With respect to liaison between Alberta Advanced Education and Career Development and Alberta Education, there are no formal systems to provide this. Rather, liaison happens on an as needed basis on particular issues. There was not seen to be any systemic barriers to liaison, according to officials.

Interviews confirmed that policy direction is firmly rooted in an economic model, not just as a context, but in a most fundamental way. Hard economic times have further entrenched this model and Type II accessibility is all but overlooked. Chapter VI will draw conclusions and make recommendations based upon the assumptional analysis and the

stakeholder perceptions.

CHAPTER VI

Conclusions and Recommendations

6.1 Introduction

Assumptional analysis proved an appropriate means of examining access to university level education in Alberta. This process revealed that an inappropriate definition of the problem had frequently prompted policy action in the wrong direction. The problem had previously been defined as an economic one and the solutions had been economic solutions having to do with the allocation of scarce resources. Re-defining the problem as a sociological one prompts quite different solutions having to do with the distribution of power and influence.

Focus shifts away from providing opportunity in the form of spaces at university to an examination of how young people view themselves and whether or not university attendance is seen by them to be part of their future. Add the powerful influences of family and schooling and perception of what sort of people should attend university, and one finds non-participant young people not making a decision not to go, but simply not including this decision as one they should make. They neither decide to register nor to not register, because the notion that a decision is to be made suggests that they view themselves as possible registrants. In fact, they do not, and that is precisely

the problem.

6.2 Factors Influencing Accessibility to University Education

Quite clearly the factors influencing participation in university education include as the most significant: socio-economic status (parental education/income); gender; home environment; ethnicity; school environment. Accordingly, policy designed to democratize access must take these factors into account. However, policy over the past forty years does not appear to have done so.

Figure 6.1 adapted from Stager in Conklin (1985) outlines how these factors interact to bring about university graduation. Virtually all policy initiatives have been aimed at the second level of this dynamic. It would not be expected that participation would be democratized. It would not be surprising to find that the traditional profile of the university student would not change, though there would be more students in absolute numbers.

The view of the access problem as an economic one may have been a narrow perspective and may have misrepresented the problem, but in an ironic twist, it may actually provide an insight about the nature of the problem. Using economic terminology, access policy historically addressed mainly the supply side of the resource represented by the "university place". In the 1960s the supply was increased to meet what was apparently the demand. As this demand was seen to be

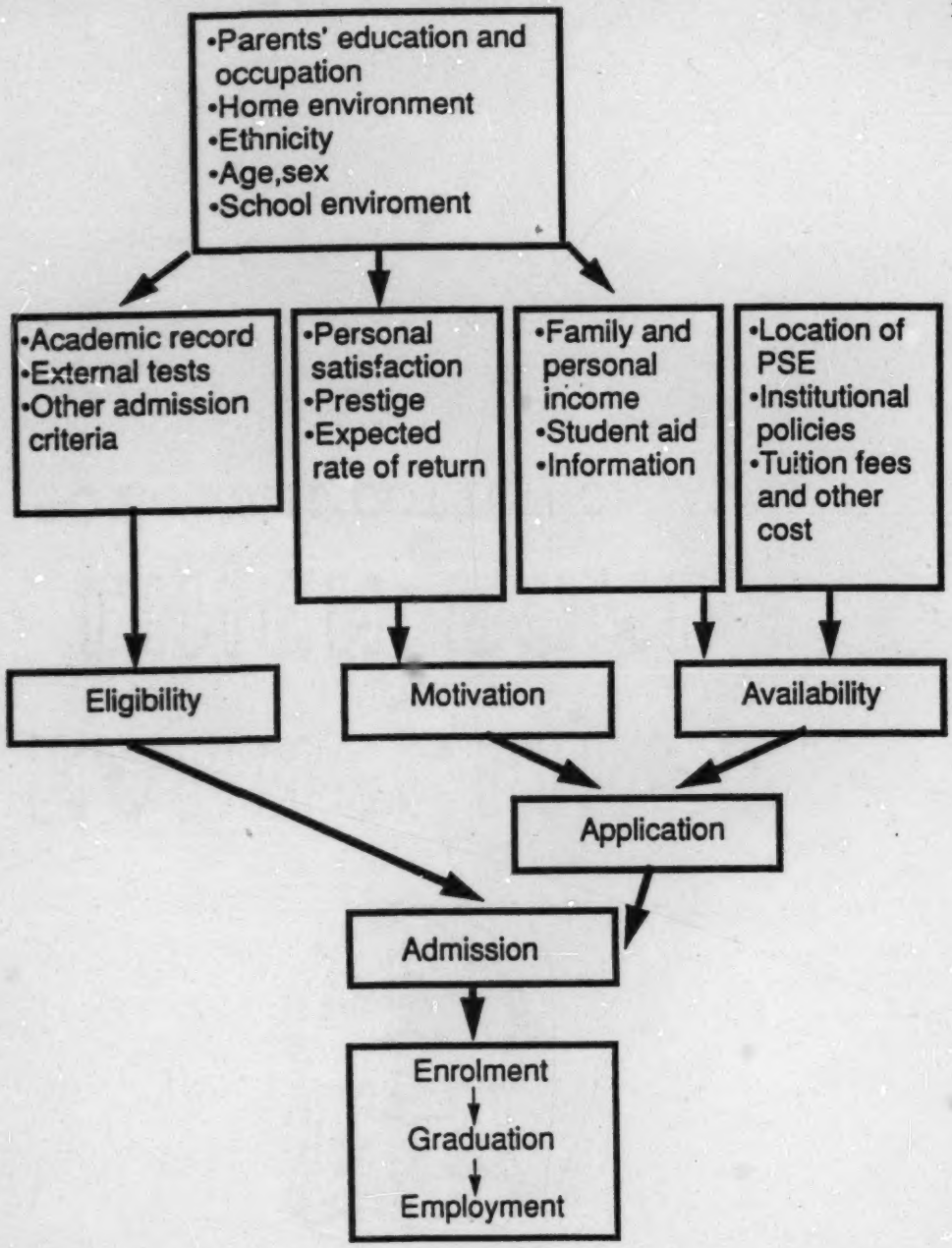

Figure 6.1 **Factors influencing accessibility to and demand for university education. Source: adapted from Stager in Conklin (1985)**

being met, this equilibrium was misconstrued as equality. In a sense the growing concern about groups that were not participating in university, could be viewed as a closer look at the "demand side". When one begins to look at the nature of the demand and at those not included, the economic model no longer suffices.

Economists might persist that the economic model still holds true. As indicated earlier, it is a reasonable model when absolute numbers of students represent one of the variables along with funding and that questionable composite factor "quality". Economists might argue that since foregone income is a factor in university participation, the access issue is really one of future employment opportunity. This assumes that the decision to participate or not is at least partly based on expected rate of return for the education investment (the opportunity cost of forgone earnings). Stager (1984), an economist, presented this argument, but had to allow that socio-cultural differences existed between, for example, expectations about return for women versus men. Age, ethnicity and other cultural factors were also seen to play a role.

In these hard economic times the provincial government appears to be retrenching to a reactive mode concerned only with Type I access. Current policy planning is clearly rooted in an economic model concerned with finding innovative means of reducing the "per unit cost" to ensure

that fixed (or reduced) budgets will meet the demand now and when the "echo baby boom" hits. There is no doubt that it is responsible governing to set a fiscal context, identifying the number of students that can be accommodated in university, given tight financial times. However, this does not preclude addressing the Type II access issues. Alberta Advanced Education and Career Development's current initiative "Access Through Innovation" is focused upon absolute numbers of enrolments with innovation stressing the reduction of unit costs. This need not be the only interpretation or focus. Innovative strategies can reduce unit costs as well as provide access to non-participant groups. After all, the educational consortia directors indicated that innovative strategies would benefit their constituents.

Only special policy initiatives aimed at mitigating the effects of the factors at the first level in figure 6.1 would be expected to have some effect on the equality of access. Initiatives need to be targeted in very specific ways. For example, the growing body of evidence about native university programs suggests very strongly that a comprehensive approach is required. The first step is to improve high school retention and graduation rates. Band run schools appear to be the most successful in the long term. Transitional university programs on reserve have the best success rates, especially if they involve the elders.

Gender differences in the participation in particular fields of study, suggest that initiatives need to be targeted in early schooling experiences. Girls need to be encouraged at school and at home to consider pursuing mathematics and science studies. Life long learning initiatives in mathematics and science-dominated fields need to consider the demands of child rearing that require women to "stop out" more frequently than men. Since women need to use part-time and distance university options, some special consideration should be given to these aspects. As educational consortia directors pointed out, universities need to be more imaginative in meeting the needs of small groups of students (often women) scattered around Alberta.

The significance of early schooling in forming the inclination to consider university an option, suggests that the school should play a mitigating role to ensure that students unlikely to receive encouragement at home, receive this support at school. School counsellors have a role in addressing the non-participant groups and encouraging these students (1) to keep their options open when making course selections and (2) to consider university education even though their background would not normally lead in this direction.

The economic climate may well set a context for the university access debate in terms of absolute numbers of students, but it does not provide the model for improved

equity of access. Socio-cultural factors rooted firmly in family, culture and schooling form the model. This is where policy action must be focused if the intent is to democratize university access. Policy should be aimed at the first level in figure 6.1.

Although liaison between Alberta Education and Alberta Advanced Education and Career Development is a critical connection between schooling and post secondary education, this liaison is not formalized at present. For example, when school officials and Alberta Education aimed special initiatives at improving school retention rates and graduation statistics, one would expect the outcome to have an affect on post secondary enrolment demand. This, in fact is expected to become a problem for Alberta Advanced Education and Career Development in the next decade and is the subject of a discussion paper High School Graduates and Enrolment Demand to the Year 2005 (1992).

A shared policy development focus could ensure that initiatives are part of the strategic plan of both departments. This shared policy development could facilitate the equality of access problem resolution.

6.3 Policy Assumptions Revealed as Myths

The assumptional analysis has revealed that policies aimed at democratizing access to university level education appear to have been based upon the following erroneous assumptions:

- opportunity = access
- increased absolute numbers = increased access
- student financial assistance = improved relative position for lower SES students
- part-time student behaviour/attitudes = full-time student behaviour/attitudes
- increased access = decreased quality
- lack of money = significant barrier
- non-participation = non-participant's choice
- all groups treated the same = equality and fairness
- current participation = fairer than 3 decades ago

These assumptions were challenged in chapter five and some were discarded while alternate assumptions were suggested. This allowed for a reconceptualizing of the access problem from which policy implications can be drawn.

6.4 Policy Implications

The fundamental error associated with defining the problem has significant policy implications. Much of the policy to date was based on the notion that the problem is an economic one and solutions were expressed in terms of the distribution of scarce resources. If the problem is reconceptualized as a sociological one, solutions are based on notions of the distribution of power and influence. Accordingly, the following policy implications come out of this re-definition and out of the assumptional pooling

outlined in chapter five:

- The problem of lack of democratization of university access should be treated as a sociological problem and not an economic one, and solutions should be framed in sociological terms;
- Since the self-concept in which one defines one's self as university material or not, is formed early in school life, a closer and more systematic liaison between Alberta Education and Alberta Advanced Education and Career Development is indicated;
- Students in junior high school should be encouraged to consider post-secondary education, especially if their family backgrounds would not normally lead in this direction;
- Students in junior high school should be advised of the benefits of post-secondary education, especially those students not likely to receive this information at home;
- School counsellors should be encouraged to mitigate the effects of home life that would not encourage students to consider university level education;
- Policy aimed at democratization of university access should avoid framing policy statements such that they imply an inverse relationship between increased access and quality. Alberta Advanced Education and Career Development needs to keep a clear distinction between

Type I and Type II access and take an advocacy role to encourage the latter;

- Policy should be designed to target particular groups for increased participation, focusing on the particular social barriers that face that group;
- Student aid policy should focus on target groups and their special needs;
- Recognizing that foregone income represents the greatest financial barrier to university participation, universities should be encouraged to use cooperative education models where practical;
- Recognizing that general living expenses represent a financial concern for students from lower socio-economic backgrounds, university residences should be adequately subsidized to keep costs to a minimum;
- Educational institutions should be encouraged to offer particular incentives to under-represented groups;
- Policy makers should take a leadership role in reconciling the rhetoric of equality of opportunity by the public and the persistent elitist view of the type of individual who ought to attend university. Where groups do not have a voice (e.g., lower SES) government needs to take an advocacy role;
- Faculties of science and engineering should be encouraged to examine why particular groups are under-represented (e.g. women, aboriginals) and correct

systemic barriers in early school years by liaising with schools;

- Junior high schools should be encouraged to initiate programs that will encourage girls and Indian people to pursue studies in science, mathematics and engineering;
- Policy makers should examine the needs of part-time students;
- With respect to Indian people, the only way university participation rates can be improved significantly, is to improve high school completion rates;
- Indian band-operated schools should be given the support necessary to provide the full range of courses including the sciences;
- Policy consideration is required to address the language development needs of Indian students, particularly those who speak an aboriginal language;
- Schooling and university education should be made available in aboriginal languages where needed;
- Universities should be encouraged to initiate programs to improve success rates among Indian students who begin university (e.g. transition programs, special counsellors);
- In all under-represented groups, families should be involved in programs in schools aimed at socializing students to consider university as an option;
- High school girls should be encouraged not to drop

science and mathematics courses to keep these options open for university study;

- The educational consortia should be encouraged to assist rural students to gain access to university level education and not just focus on upgrading and vocational courses. Universities should demonstrate greater commitment to assisting consortia;
- The role of community colleges should be clarified to ensure they are serving the group for which they were designed. The role of university transfer programs in addressing Type II access should be examined;
- The role of Athabasca University should be clarified since its print-based delivery system does not meet the needs of traditionally under-represented groups.

6.5 Research Questions Revisited

An assumptional analysis of university access in Alberta was a useful means of restructuring the problem for improved policy development. In general, the problem is restructured as a sociological rather than an economic one. This explains why economic solutions have not been successful in democratizing access. Moreover, many assumptions underlying policy development have been challenged and alternate assumptions postulated. In short, the access problem is an ill-structured problem and appropriate for application of assumptional analysis.

The participation data revealed that there are

particular groups which are under-represented in university studies and that assumptions exist which serve to sustain barriers to their participation. The assumptional analysis permits the restructuring of the problem to better address inequities.

6.6 Recommendations

The overriding recommendation is that the access issue be treated as a sociological problem rather than an economic one. Once this conceptualization of the problem is accepted the following recommendations are indicated:

RECOMMENDATION 1:

That Alberta Education and Alberta Advanced Education and Career Development sponsor joint pilot projects targeting particular non-participant groups.

RECOMMENDATION 2:

That Alberta Advanced Education and Career Development conduct Participation Patterns Studies every three or four years.

RECOMMENDATION 3:

That university teacher education and counselling programs address the sociological aspects of non-participation in post-secondary education.

RECOMMENDATION 4:

That elementary and junior high school teachers and counsellors encourage discussion of post-secondary education with students and parents.

RECOMMENDATION 5:

That community and cultural groups be included in schooling decisions.

RECOMMENDATION 6:

That schools offer special programs to encourage girls and native people to consider pursuing careers involving mathematics and science.

RECOMMENDATION 7:

That university faculties of mathematics, science and engineering engage in joint projects with schools to encourage women and native people to consider further education in these fields of study.

RECOMMENDATION 8:

That a review of student financing focus upon the barriers of foregone income and general living expenses.

RECOMMENDATION 9:

That Alberta Advanced Education and Career Development undertake a cost/benefit analysis of tuition fees.

RECOMMENDATION 10:

That university residence fees be examined in the light of the financial barrier faced by students of limited means.

RECOMMENDATION 11:

That the special needs of part-time students be examined by Alberta Advanced Education and Career

Development.

RECOMMENDATION 12:

That schools operated by Indian bands be given special assistance in university transitional programming with the assistance of the universities.

RECOMMENDATION 13:

That universities hire more Native Albertans and women in faculty positions.

RECOMMENDATION 14:

That the role of the educational consortia be clarified with respect to providing university level programs to rural Albertans and universities be encouraged to assist the consortia in meeting this need.

RECOMMENDATION 15:

That the role of an open university be clarified in relation to democratizing university access, and funding be contingent upon addressing the needs of non-participant groups.

RECOMMENDATION 16:

That the role of the community colleges be clarified with respect to their original mandates and in light of pressure to provide university transfer programming.

RECOMMENDATION 17:

That Alberta Advanced Education and Career Development monitor in particular the participation rates of individuals from lower socio-economic backgrounds, and

take an advocacy role for this group.

6.7 Further Research Needed

In order to inform policy makers, there is more research required in the following areas:

- examine the social construction aspects of university participation;
- conduct pilot projects in which particular groups are targeted for specialized programs;
- examine junior high school outreach programs which encourage lower socio-economic students and their families to consider university education;
- conduct a cost/benefit study of tuition comparing the revenue with the costs of maintaining the bureaucracy that monitors tuition collection;
- conduct research into student aid and under-represented groups;
- examine income contingent repayment plans for student loans;
- conduct a study of part-time students and their special needs;
- Alberta Advanced Education and Career Development should conduct Participation Patterns Studies at least every decade;
- conduct a study of the role of the colleges in Alberta;
- conduct a study of the role of the educational consortia;

- examine the role of Athabasca University and clarify the role of an "open" university.

6.8 Conclusion

An assumptional analysis, problem structuring approach to the access issue served to re-structure the problem in a very significant way. The Type II access problem has been, and is now being, viewed as purely an economic problem. Economic solutions aimed at the distribution of scarce resources were demonstrated not to have addressed the problem. Assumptional analysis revealed that the problem should be reconceptualized as a sociological one, and that policy development should be guided by this re-shaping of the problem.

More precisely, the problem is essentially a sociological one but within an economic reality, for the two are not mutually exclusive. They are, in fact complementary from a policy development point of view. Policy planners would do well to add the sociological aspect to their economic models when considering access issues.

Census and participation rate data revealed that policy initiatives had not been successful in increasing the relative participation of groups traditionally underrepresented in universities. Interviews confirmed that an economic model has, and is, guiding access policy development. The inadequacy of the access quality trade off assumption was demonstrated.

Specific policy implications and recommendations were made aimed at particular actors within the reconceptualized sociological problem. The public expects that university level education will be provided in a cost efficient way, especially in these hard economic times. However, the public continues to expect that access should be equitable across all groups in Alberta. Careful policy development can address both of these expectations.

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APPENDIX I

STRUCTURED INTERVIEW SCHEDULE

Interviewees: Officials from Alberta Advanced Education and Career Development

Pre-interview:

(1) Project explanation - aims of project;
(2) Request permission to audio-tape;
(3) Explanation of the types of questions that will be asked, that questions will focus on perceptions and attitudes about access to university level education

Interview Proper:

1. What is your understanding of the expressions:

   (i) "access to university level education"
   (ii) "equality of opportunity"
   (iii) "universality of access to university level education"

2. To what extent do you feel that the universities in Alberta meet the needs of the following groups of Albertans:

   (i) Albertans outside urban centres
   (ii) Native people
   (iii) Metis people
   (iv) Inuit people
   (v) Albertans with physical disabilities
   (vi) Albertans with mental disabilities
   (vii) Working Albertans
   (viii) Albertans with limited financial means
   (ix) Albertans beyond the age of 24
   (x) Female Albertans
   (xi) Albertans who would be considered to be of lower socio-economic status

3. To what extent do you feel that the Alberta Government responds to the needs of the groups identified in #2?

4. How would you characterize the needs of the groups identified in #2 with respect to university level programming?

5. To what extent do you feel the Alberta Government is sensitive to providing access to university level education to Albertans?

6. Do you think that the federal government should have a role in providing/facilitating access to university level education to some groups in Alberta? Please specify.

7. In spite of efforts by the provincial government to increase the participation of certain groups (lower socio-economic background, native people, rural people and women)these groups remain underrepresented in universities (women in particular areas of study). What do you feel are the barriers for the following groups:

   (i) lower socio-economic background
   (ii) native people
   (iii) rural people
   (iv) women

8. How would you like to see government policy change with respect to university access?

9. Are there policy changes now being planned? [ask for documents]

10. How would you like to see university policies change with respect to access?

11. How would you characterize an ideal relationship among universities, colleges and the educational consortia?

APPENDIX II

STRUCTURED INTERVIEW SCHEDULE

Interviewees: Executive Directors of Alberta Educational Consortia

Pre-interview:

(1) Project explanation - aims of project;
(2) Request permission to audio-tape;
(3) Explanation of the types of questions that will be asked, that questions will focus on perceptions and attitudes about access to university level education

Interview Proper:

1. What is your understanding of the expressions:

   (i) "access to university level education"
   (ii) "equality of opportunity"
   (iii) "universality of access to university level education"

2. How would you characterize the role of your consortia in providing university level education to your constituents/community? [ask for copy of mission statement, terms of reference, etc.]

3. Please describe your constituents/community.

4. To what extent do you feel that the universities meet the needs of your constituents/community?

5. To what extent do you feel that the universities in Alberta meet the needs of the following groups of Albertans within your community:

   (i) Albertans outside urban centres
   (ii) Native people
   (iii) Metis people
   (iv) Inuit people
   (v) Albertans with physical disabilities
   (vi) Albertans with mental disabilities
   (vii) Working Albertans
   (viii) Albertans with limited financial means
   (ix) Albertans beyond the age of 24
   (x) Female Albertans
   (xi) Albertans who would be considered to be of lower socio-economic status

6. To what extent do you feel that the Alberta Government responds to the needs of the groups identified in #5 within your community?

7. To what extent do you feel that the government responds to the university needs of your community in general?

8. How would you characterize the needs of the groups identified in #5 in your community with respect to university level programming?

9. To what extent do you feel the Alberta Government is sensitive to providing access to university level education to Albertans?

10. Do you think that the federal government should have a role in providing/facilitating access to university level education to some groups in Alberta? Please specify.

11. In spite of efforts by the provincial government to increase the participation of certain groups (lower socio-economic background, native people, rural people and women)these groups remain underrepresented in universities (women in particular areas of study). What do you feel are the barriers for the following groups:

    (i) lower socio-economic background
    (ii) native people
    (iii) rural people
    (iv) women

12. How would you like to see government policy change with respect to university access?

13. How would you like to see university policies change with respect to access?

14. How would you characterize an ideal relationship among universities, colleges and the educational consortia?